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(19) **United States**

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Reed et al. (43) **Pub. Date: Dec. 26, 2002**

(54) **OXIME-GROUP CONTAINING OESTRONE
SULPHATASE INHIBITORS**

(30) **Foreign Application Priority Data**

Dec. 3, 1998 (GB)..... PCT/GB98/03620
Dec. 4, 1997 (GB)..... 9725749.7

(76) Inventors: **Michael John Reed, London (GB);
Barry Victor Lloyd Potter, Bath (GB)**

Publication Classification

(51) **Int. Cl.⁷** **C07C 311/00; C07C 309/00;
C07C 307/00; C07C 303/00**
(52) **U.S. Cl.** **558/48**

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(57) **ABSTRACT**

(*) Notice: This is a publication of a continued prosecution application (CPA) filed under 37 CFR 1.53(d).

A sulphamate compound suitable for use as an inhibitor of oestrone sulphatase (E.C.3.1.6.2) is described. The compound is a polycyclic compound comprising at least two ring components, wherein the polycyclic compound comprises at least one sulphamate group attached to at least one of the ring components, and wherein at least one oxime group is attached to or is part of at least one of the ring components.

(21) Appl. No.: **09/572,237**

(22) Filed: **May 17, 2000**

In Vivo Inhibition (Rat Liver Sulphatase)

[0162] 99.2±0.42%. @ 2 mg/kg/dx5 ol, ORAL DOSE.

[0163] Examples 2 and 3 are further referenced in Annex 1.

EXAMPLE 4

Measurement of Estrogenic Activity

[0164] Compounds according to the present invention such as Compound 2 (such as at levels of 0.1 mg/Kg/day for five days) are administered orally to rats with another group of animals receiving vehicle only (propylene glycol). At the end of the study uteri are obtained and weighed with the results being expressed as uterine weight/whole body weightx100.

[0165] The results show that administration of Compound 2 has an effect on uterine growth, showing that the compound is oestrogenic.

[0166] All publications mentioned in the above specification are herein incorporated by reference. Various modifications and variations of the described methods and system of the invention will be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the described modes for carrying out the invention which are obvious to those skilled in chemistry or related fields are intended to be within the scope of the following claims.

1. A sulphamate compound suitable for use as an inhibitor of oestrone sulphatase (E.C. 3.1.6.2), wherein the compound is a polycyclic compound comprising at least two ring components, wherein the polycyclic compound comprises at least one sulphamate group attached to at least one of the ring components, and wherein at least one oxime group is attached to or is part of at least one of the ring components.

2. A sulphamate compound according to claim 1 wherein at least one sulphamate group attached to at least one of the ring components, and wherein at least one oxime group is attached to or is part of at least one of the other ring components.

3. A sulphamate compound according to claim 2 wherein the sulphamate group is distanced away from the oxime group.

4. A sulphamate compound according to any one of claims 1 to 3 wherein the polycyclic compound has a steroidal structure.

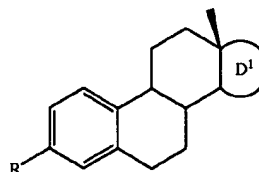
5. A sulphamate compound according to claim 4 wherein the oxime group is attached to or is part of a steroidal D ring.

6. A sulphamate compound according to any one of the preceding claims wherein the polycyclic compound has a steroidal structure and wherein the sulphamate group is attached to the A ring.

7. A sulphamate compound according to claim 6 wherein the sulphamate group is attached to the 3 position of the A ring.

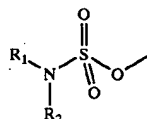
8. A sulphamate compound according to claim 7 wherein the compound has the formula:

(A)



wherein R is a sulphamate group and D¹ represents the combination of a ring component attached to which or a part of which is the oxime group.

9. A sulphamate compound according to any one of the preceding claims wherein the sulphamate group has the formula:



wherein each of R₁ and R₂ is independently selected from H or a hydrocarbyl group.

10. A sulphamate compound according to any one of the preceding claims wherein the compound is not hydrolysable by an enzyme having steroid sulphatase activity.

11. A sulphamate compound according to any one of the preceding claims wherein the compound is capable of exhibiting an oestrogenic effect.

12. A sulphamate compound according to any one of the preceding claims wherein the oxime group is an anti isomer.

13. A pharmaceutical composition comprising a sulphamate compound according to any one of the preceding claims admixed with a pharmaceutically acceptable diluent, carrier or excipient.

14. Use of a sulphamate compound according to any one of claims 1 to 12 in the manufacture of a medicament to inhibit steroid sulphatase activity.

15. Use of a sulphamate compound according to any one of claims 1 to 12 in the manufacture of an oestrogenic composition.

16. A method of treatment comprising treating a subject with a sulphamate compound according to any one preceding claims 1 to 12 or a composition according to claim 13 and in an amount such that at least some steroid sulphatase inhibition occurs within the subject.

17. A method of treatment comprising treating a subject with a sulphamate compound according to any one preceding claims 1 to 12 or a composition according to claim 13 and in an amount such that at least some oestrogenic activity occurs within the subject.

18. A process for preparing a sulphamate compound according to any one of claims 1 to 12 comprising a sulphamylation step.

19. A sulphamate compound substantially as described herein.

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US006642397B1

(12) **United States Patent**
Reed et al.(10) **Patent No.:** US 6,642,397 B1(45) **Date of Patent:** Nov. 4, 2003(54) **STEROID SULPHATASE INHIBITORS**(75) **Inventors:** Michael John Reed, London (GB);
Barry Victor Lloyd Potter, Avon (GB)(73) **Assignee:** Sterix Limited, Oxford (GB)(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) **Appl. No.:** 09/579,163(22) **Filed:** May 25, 2000**Related U.S. Application Data**

(60) Division of application No. 09/238,345, filed on Jan. 27, 1999, now Pat. No. 6,187,766, which is a division of application No. 09/111,927, filed on Jul. 8, 1998, now Pat. No. 6,011,024, which is a continuation-in-part of application No. 08/458,352, filed on Jun. 2, 1995, now Pat. No. 5,830,886, which is a division of application No. 08/196,192, filed as application No. PCT/GB92/01587 on Aug. 28, 1992, now Pat. No. 5,616,574, said application No. 09/111,927, is a continuation-in-part of application No. PCT/GB97/03352, filed on Dec. 4, 1997, and a continuation-in-part of application No. PCT/GB97/00600, filed on Mar. 4, 1997, and a continuation-in-part of application No. PCT/GB97/00444, filed on Feb. 17, 1997.

(30) **Foreign Application Priority Data**

Aug. 28, 1991 (GB) 9118478

(51) **Int. Cl.⁷** C07J 1/00(52) **U.S. Cl.** 552/626(58) **Field of Search** 552/626(56) **References Cited****U.S. PATENT DOCUMENTS**

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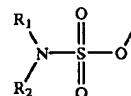
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Spillane and Burke, *Synthesis*, 12 (pp. 1021-1024), 1986.

(List continued on next page.)

Primary Examiner—Barbara P. Badio*(74) Attorney, Agent, or Firm*—Frommer Lawrence & Haug; Thomas J. Kowalski(57) **ABSTRACT**

A method of inhibiting steroid sulphatase activity in a subject in need of same is described. The method comprises administering to said subject a steroid sulphatase inhibiting amount of a ring system compound; which ring system compound comprises a ring to which is attached sulphamate group of the formula



wherein each of R₁ and R₂ is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more hetero atoms or groups in the alkylene chain; and wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and if the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μM.

19 Claims, 20 Drawing Sheets

TABLE 1-continued

| Inhibitor | Concentration Tested (mM) | % Inhibition (Mean) | |
|------------------|---------------------------|---------------------|----------------------|
| | | MCF-7 Cells | Placental Microsomes |
| 2-methoxy EMATE | 0.1 | 96.0 | — |
| | 1 | 93.6 | — |
| | 10 | 96.2 | 99.0 |
| | 50 | — | 99.7 |
| | 100 | — | 99.7 |
| 2-nitro EMATE | 0.05 | — | 44.5 |
| | 0.5 | — | 93.9 |
| | 5 | — | 99.0 |
| 4-nitro EMATE | 20 | — | 99.4 |
| | 20 | — | 99.0 |
| NOMATE | 0.1 | 96.4 | 97.2 |
| (17-dcoxy EMATE) | 1 | 99.1 | 99.5 |
| | 10 | 99.7 | 99.5 |
| | 25 | 99.7 | 99.7 |

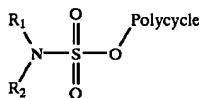
— = not tested

Irreversible time- and concentration-dependent inhibition is assumed for these compounds in keeping with established precedent (Biochemistry, 1995, 34, 11508-11).

Other modifications of the present invention will be apparent to those skilled in the art.

What is claimed is:

1. A purified compound of the formula

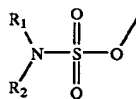


wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl; wherein at least one of R_1 and R_2 is H; and

wherein the group Polycycle is a ring system comprising at least four rings, at least three of which are fused; wherein the compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2);

wherein if the sulphamate group on the compound were to be replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μ M.

2. A purified compound comprising a steroidal ring structure and a sulphamate group of the formula



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl; wherein at least one of R_1 and R_2 is H; and wherein the compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2);

wherein if the sulphamate group on the compound were to be replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μ M.

3. A purified compound according to claim 2, wherein the steroidal ring structure is a residue of a 3-sterol.

4. A purified compound according to claim 3, wherein the sterol is selected from the group consisting of oestrone, dehydroepiandrosterones, substituted oestrones and substituted dehydroepiandrosterones.

5. A purified compound according to claim 1 wherein R_1 and R_2 are independently selected from H, or a C_1 - C_{10} alkyl; wherein at least one of R_1 and R_2 is H.

6. A purified compound according to claim 2 wherein R_1 and R_2 are independently selected from H, or a C_1 - C_{10} alkyl; wherein at least one of R_1 and R_2 is H.

7. A purified compound according to claim 1 wherein R_1 and R_2 are independently selected from H, or a C_1 - C_5 alkyl; wherein at least one of R_1 and R_2 is H.

8. A purified compound according to claim 2 wherein R_1 and R_2 are independently selected from H, or a C_1 - C_5 alkyl; wherein at least one of R_1 and R_2 is H.

9. A purified compound according to claim 1 wherein R_1 and R_2 are independently selected from H or methyl; wherein at least one of R_1 and R_2 is H.

10. A purified compound according to claim 2 wherein R_1 and R_2 are independently selected from H or methyl; wherein at least one of R_1 and R_2 is H.

11. A purified compound according to claim 1 wherein R_1 is H and R_2 is H.

12. A purified compound according to claim 2 wherein R_1 is H and R_2 is H.

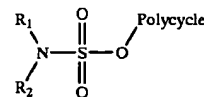
13. A purified compound according to claim 1 wherein the compound is any one of oestrone-3-sulphamate, oestrone-3-N-monomethylsulphamate.

14. A purified compound according to claim 3 wherein the compound is any one of oestrone-3-sulphamate, oestrone-3-N-monomethylsulphamate.

15. A purified compound according to claim 1 wherein the group Polycycle represents the residue of a sterol.

16. A purified compound according to claim 15 wherein the sterol is a 3-sterol.

17. A purified compound according to claim 2 wherein the compound is a compound of the formula



wherein the group Polycycle represents the residue of a 3-sterol, and wherein R_1 and R_2 are H.

18. A purified compound according to claim 1 or 2 wherein the compound is Oestrone 3-sulphamate.

19. A purified compound according to claim 1 or 2 wherein the compound is Oestrone-3-N-monomethylsulphamate.

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US006187766B1

(12) **United States Patent**
Reed et al.(10) **Patent No.:** US 6,187,766 B1(45) **Date of Patent:** Feb. 13, 2001(54) **STEROID SULPHATASE INHIBITORS**(75) **Inventors:** Michael John Reed, London; Barry Victor Potter, Avon, both of (GB)(73) **Assignee:** Imperial College of Science Technology & Medicine, London (GB)(*) **Notice:** Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.(21) **Appl. No.:** 09/238,345(22) **Filed:** Jan. 27, 1999**Related U.S. Application Data**

(60) Division of application No. 09/111,927, filed on Jul. 8, 1998, now Pat. No. 6,011,024, which is a continuation-in-part of application No. 08/458,352, filed on Jun. 2, 1995, now Pat. No. 5,830,886, which is a division of application No. 08/196,192, filed on Dec. 27, 1994, now Pat. No. 5,616,574, and a continuation-in-part of application No. PCT/GB97/00600, filed on Mar. 4, 1997, and a continuation-in-part of application No. PCT/GB97/00444, filed on Feb. 17, 1997, and a continuation-in-part of application No. PCT/GB97/03352, filed on Dec. 4, 1997.

(30) **Foreign Application Priority Data**

Aug. 28, 1991 (GB) 9118478

(51) **Int. Cl.⁷** A61K 31/165(52) **U.S. Cl.** 514/178; 514/603; 514/604; 514/601(58) **Field of Search** 514/178, 601, 514/603, 604(56) **References Cited****U.S. PATENT DOCUMENTS**

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| 5,281,587 | 1/1994 | Reed . |
| 5,344,827 | 9/1994 | Reed . |
| 5,604,215 | 2/1997 | Reed et al. . |
| 5,616,574 | 4/1997 | Reed et al. . |
| 5,677,292 | 10/1997 | Li et al. . |
| 5,830,886 | 11/1998 | Reed et al. . |

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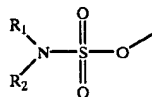
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Primary Examiner—Rebecca Cook(74) *Attorney, Agent, or Firm*—Frommer Lawrence & Haug LLP; Thomas J. Kowalski(57) **ABSTRACT**

A method of inhibiting steroid sulphatase activity in a subject in need of same as described.

The method comprises administering to said subject a steroid sulphatase inhibiting amount of a ring system compound; which ring system compound comprises a ring to which is attached a sulphamate group of the formula



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more hetero atoms or groups in the alkylene chain; and wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and if the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μM .

3 Claims, 26 Drawing Sheets

TABLE 1-continued

| Inhibitor | Concentration Tested (mM) | % Inhibition (Mean) | |
|----------------------------|---------------------------|---------------------|----------------------|
| | | MCF-7 Cells | Placental Microsomes |
| 2,4-n-dipropyl EMATE | 100 | — | 23.7 |
| | 0.1 | 6.6 | — |
| | 1 | 10.6 | — |
| | 0.01 | 23.2 | — |
| | 0.1 | 76.1 | — |
| 2-allyl EMATE | 1 | 94.2 | 45.6 |
| | 10 | 93.7 | 65.4 |
| | 25 | — | 75.3 |
| | 50 | — | 86.6 |
| | 100 | — | 89.6 |
| 4-allyl EMATE (approx 75%) | 1 | — | 29.1 |
| | 10 | — | 54.2 |
| | 25 | — | 59.0 |
| | 50 | — | 65.1 |
| 2,4-di-allyl EMATE | — | — | — |
| | 0.1 | 96.0 | — |
| 2-methoxy EMATE | 1 | 93.6 | — |
| | 10 | 96.2 | 99.0 |
| | 50 | — | 99.7 |
| | 100 | — | 99.7 |
| | 0.05 | — | 44.5 |
| 2-nitro EMATE | 0.5 | — | 93.9 |
| | 5 | — | 99.0 |
| | 50 | — | 99.4 |
| | 20 | — | 99.0 |
| 4-nitro EMATE | 0.1 | 96.4 | 97.2 |
| | 1 | 99.1 | 99.5 |
| | 10 | 99.7 | 99.5 |
| | 25 | 99.7 | 99.7 |

— = not tested

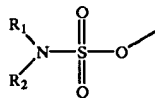
Irreversible time- and concentration-dependent inhibition is assumed for these compounds in keeping with established precedent (Biochemistry, 1995, 34, 11508-11).

Other modifications of the present invention will be apparent to those skilled in the art.

What is claimed is:

1. A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a ring system compound present in an amount to provide 100-500 mg of compound per unit dose;

wherein the ring system compound has a ring system and a sulphamate group of the formula:



wherein each of R₁ and R₂ is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, and at least one of R₁ and R₂ is H;

wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (EC 3.1.6.2); and

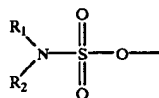
wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it provides a substrate for a steroid sulphatase enzyme (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate

compound and incubated with a steroid sulphatase enzyme (EC 3.1.6.2) at a pH of 7.4 and 37° C. it provides a K_m value of less than 50 μM.

2. A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a ring system compound present in a pharmaceutically effective amount;

wherein the ring system compound has a ring system and a sulphamate group of the formula:



wherein each of R₁ and R₂ is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, and at least one of R₁ and R₂ is H;

wherein the ring system has at least three rings, wherein at least two of those rings are fused;

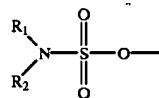
wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it provides a substrate for a steroid sulphatase enzyme (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (EC 3.1.6.2) at a pH of 7.4 and 37° C. it provides a K_m value of less than 50 μM.

3. A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a ring system compound present in a pharmaceutically effective amount;

wherein the ring system compound has a steroidal ring structure and a sulphamate group of the formula:



wherein each of R₁ and R₂ is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, and at least one of R₁ and R₂ is H;

wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it provides a substrate for a steroid sulphatase enzyme (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (EC 3.1.6.2) at a pH of 7.4 and 37° C. it provides a K_m value of less than 50 μM.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,187,766 B1
DATED : February 13, 2001
INVENTOR(S) : Reed et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

ON THE COVER PAGE:

Under [73] please change the Assignee from "Imperial College of Science Technology & Medicine, London, United Kingdom" to --Sterix Limited, Oxford, United Kingdom--.

Under [56], References Cited OTHER PUBLICATIONS:

Line 1, change "Stoler" to--Stolzner-- and

Line 6, change "Clausen" to --Claussen--.

ON THE COVER PAGE:

Under [73] please change the Assignee from "Imperial College of Science Technology & Medicine, London, United Kingdom" to --Sterix Limited, Oxford, United Kingdom--.

Under [56], References Cited OTHER PUBLICATIONS:

Line 1, change "Stoler" to--Stolzner-- and

Line 6, change "Clausen" to --Claussen--.

Signed and Sealed this

Twelfth Day of June, 2001

Attest:

Nicholas P. Godici

Attesting Officer

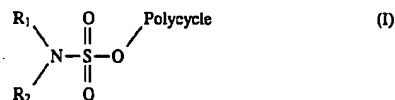
NICHOLAS P. GODICI
Acting Director of the United States Patent and Trademark Office



US005616574A

United States Patent [19][11] **Patent Number:** **5,616,574****Reed et al.**[45] **Date of Patent:** **Apr. 1, 1997**[54] **STEROID SULPHATASE INHIBITORS**[75] **Inventors:** **Michael J. Reed, London; Barry V. L. Potter, Bathford, both of United Kingdom**[73] **Assignee:** **Imperial College of Science, Technology and Medicine, United Kingdom**[21] **Appl. No.:** **196,192**[22] **PCT Filed:** **Aug. 28, 1992**[86] **PCT No.:** **PCT/GB92/01587**§ 371 **Date:** **Dec. 27, 1994**§ 102(e) **Date:** **Dec. 27, 1994**[87] **PCT Pub. No.:** **WO93/05064****PCT Pub. Date:** **Mar. 18, 1993**[30] **Foreign Application Priority Data**Aug. 29, 1991 [GB] **United Kingdom** 9118478[51] **Int. Cl.⁶** **A61K 31/165; C07J 1/00**[52] **U.S. Cl.** **514/178; 552/626**[58] **Field of Search** **552/626; 514/178, 514/171**[56] **References Cited****FOREIGN PATENT DOCUMENTS**1398026 6/1975 **United Kingdom**.**OTHER PUBLICATIONS***Zeitschrift fur Chemie, Schwarz et al, 14 (1) 1974 pp. 15-16.**Primary Examiner—Rebecca Cook**Attorney, Agent, or Firm—Nixon & Vanderhye*[57] **ABSTRACT**

Steroid sulphatase inhibitors and pharmaceutical compositions containing them for use in the treatment of oestrogen dependent tumors, especially breast cancer. The steroid sulphatase are sulphamate esters of formula (I)

where R₁ and R₂ are each H, alkyl, alkenyl, cycloalkyl or aryl, or together represent an alkylene group optionally containing a heteroatom e.g. —O— or —NH—; and —O— polycycle represents the residue of a polycyclic alcohol such as a sterol, preferably a 3-sterol.**12 Claims, 5 Drawing Sheets**

11

TABLE V

| Steroid Sulphatase Activity in Liver Microsome Preparations from Rats treated with subcutaneous Oestrone-3-sulphamate | | | |
|--|-------------------|---|--------------------------|
| Treatment Group | Assay Substrate | Steroid Sulphatase Activity \bar{x} (nmol/30 min/200 μ g protein) | % reduction over control |
| control (vehicle) | E ₁ -S | 20.95 \pm 0.2 | — |
| E ₁ -SO ₂ NH ₂ | E ₁ -S | 0.34 \pm 0.1*** | 98.4% |
| control (E ₁ -S) | E ₁ -S | 20.6 \pm 0.4 | — |
| E ₁ -S + E ₁ -SO ₂ NH ₂ | E ₁ -S | 0.21 \pm 0.03*** | 99.0% |
| control (vehicle) | DHA-S | 1.73 \pm 0.4 | — |
| E ₁ -SO ₂ NH ₂ | DHA-S | 0.1 \pm 0.01*** | 94.2% |
| control (E ₁ -S) | DHA-S | 1.71 \pm 0.1 | — |
| E ₁ -S + E ₁ -SO ₂ NH ₂ | DHA-S | 0.09 \pm 0.01*** | 94.7% |

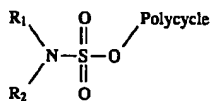
 \bar{x} mean \pm 1 S.D. n = 3***p \leq 0.001E₁-S = oestrone-3-sulphamate

DHA-S = dehydroepiandrosterone-3-sulphate

E₁-SO₂NH₂ = oestrone-3-N,N-dimethylsulphamate

We claim:

1. A compound of the formula



where R₁ and R₂ are each independently selected from H and methyl, provided that at least one of R₁ and R₂ is hydrogen; and

the group —O— polycyclic is a 3-sterol the sulfate of which is hydrolyzable by an enzyme having steroid sulphatase (E.C. 3.1.6.2) activity; or a pharmaceutically acceptable salt thereof.

2. The compound according to claim 1, wherein the sterol is selected from the group consisting of oestrone, dehydroepiandrosterone, a substituted oestrone, a substituted dehydroepiandrosterone, oestradiol, substituted oestradiol, ostriol and substituted ostriol.

12

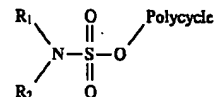
3. The compound according to claim 2, wherein R₁ is hydrogen and R₂ is methyl.

4. The compound according to claim 1, wherein R₁ and R₂ are both hydrogen.

5. The compound according to claim 1, wherein the compound is oestrone-3-sulphamate.

6. The compound according to claim 1, wherein the compound is oestrone-3-N-monomethylsulphamate.

7. A pharmaceutical composition comprising in admixture with a pharmaceutically acceptable diluent or carrier a compound of the formula



where R₁ and R₂ are each independently selected from H and methyl, provided that at least one of R₁ and R₂ is hydrogen; and

the group —O— polycyclic is a 3-sterol the sulfate of which is hydrolyzable by an enzyme having steroid sulfatase (E.C. 3.1.6.2) activity;

or a pharmaceutically acceptable salt thereof.

8. The composition according to claim 7, wherein the sterol is selected from the group consisting of oestrone, dehydroepiandrosterone, a substituted oestrone, a substituted dehydroepiandrosterone, oestradiol, substituted oestradiol, ostriol and substituted ostriol.

9. The composition according to claim 8, wherein R₁ is hydrogen and R₂ is methyl.

10. The composition according to claim 7, wherein R₁ and R₂ are both hydrogen.

11. The composition according to claim 7, wherein the compound is oestrone-3-sulfamate.

12. The composition according to claim 7, wherein the compound is oestrone-3-N-monomethylsulfamate.

* * * * *

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(FILE 'HOME' ENTERED AT 10:49:06 ON 12 NOV 2003)

FILE 'REGISTRY' ENTERED AT 10:49:10 ON 12 NOV 2003

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L2 50 S L1
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L4 STRUCTURE UPLOADED
L5 640 S L4 FULL SUB=L3

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L8 1 S L6 NOT PY>=1991

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L10 ANSWER 1 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 139:22385 MARPAT
 TITLE: Phosphoric acid isomerization of a 5(10),9(11)-diene steroid to the corresponding 4,9-diene steroid
 INVENTOR(S): Vaidyanathan, Rajappa
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 5 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

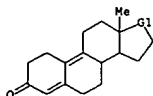
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|---------------|------|----------|-----------------|----------|
| US 2003109728 | A1 | 20030612 | US 2002-315273 | 20021210 |
| WO 2003053990 | A1 | 20030703 | WO 2002-US39357 | 20021210 |

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-339620P 20011212
 OTHER SOURCE(S): CASREACT 139:22385
 AB The .DELTA.4,9-steroids I (R1 = O; R = .alpha.- or .beta.-OH, silyl protected OH, acyloxy; R1 = H, alkyl, Ph) were prepd. by reaction of .DELTA.5(10),9(11)-diene steroids II with a phosphorous contg. acid. Thus, 17.beta.-hydroxyandrost-5(10),9(11)-dien-3-one was treated with phosphoric acid at 20-25.degree. for 2 h followed by cooling to 10.degree. and addn. of DMF and water to give 17.beta.-hydroxyandrost-4,9-dien-3-one as ppt.

MSTR 1



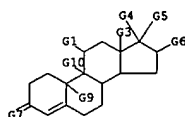
G1 = C(O)
 MPL: claim 1

L10 ANSWER 2 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 138:390583 MARPAT
 TITLE: Skin-lightening agents containing substances which reduce tyrosinase and cosmetics containing the agents
 INVENTOR(S): Sudo, Shigeru
 PATENT ASSIGNEE(S): Mikimoto Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| JP 2003155222 | A2 | 20030527 | JP 2001-351904 | 20011116 |
| JP 2001-351904 | | | JP 2001-351904 | 20011116 |

PRIORITY APPLN. INFO.: JP 2001-351904 20011116
 AB Skin-lightening agents contain substances which reduce amt. of tyrosinase of human melanocytes. The substances may be steroids which show antagonistic activity on progesterone/glucocorticoid receptors and may be represented by I [R1 = ethynyl, furyl, C3-6 cycloalkyl, Ph, naphthyl, C6H4Ph, C.itoreq.6 alkyl which may have several unstd. bond, alkenyl; R2 = Me, Et; R3 = H, (un)substituted alkyl, alkenyl, alkenyl, hydroxyalkyl, carbonylalkoxy, hydroxyalkyl; R4 = H, OH, C.itoreq.12 alkyl, alkenyl, alkenyl; R5 = .alpha.- or .beta.- or .gamma.- or anti-hydroxyimino, C1-45 alkoxyimino; A and B are bonded together to form .alpha.-epoxy group or optional double bond]. Skin-lightening cosmetics contg. the agents are also claimed. Mifepristone significantly decreased amt. of tyrosinase in normal human epidermal melanocytes and the action was effective in the presence of forskolin or .alpha.-MSH. A cream contg. mifepristone was also formulated.

MSTR 1



MPL: claim 3

L10 ANSWER 3 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 138:379257 MARPAT
 TITLE: Methods for the treatment of major depressive disorder using glucocorticoid receptor antagonists
 INVENTOR(S): Peeters, Bernardus Wijnand Mathys Marie; Sennel, Cornelis
 PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.
 SOURCE: FCT Int. Appl., 14 pp.
 CODEN: PIXXDZ
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

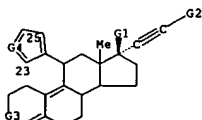
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2003043640 | A2 | 20030530 | WO 2002-EP12854 | 20021118 |

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2001-204518 20011123
 AB The invention provides a method for the treatment of a patient suffering from major depressive disorder by administering to the patient an effective amt. of a glucocorticoid receptor antagonist and to methods for establishing the optimal treatment regimen.

MSTR 1



G3 = CHOH
 MPL: claim 7

L10 ANSWER 4 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 138:304438 MARPAT
 TITLE: Preparation of 8.beta.-substituted 11.beta.-(para-substituted)aryl-estra-2,3,5(10)-triene derivatives as contraceptives and antiproliferatives
 INVENTOR(S): Braeuer, Nico; Peters, Olaf; Hillisch, Alexander; Hegele-hartung, Christa; Muhn, Peter
 PATENT ASSIGNEE(S): Schering AG, Germany
 SOURCE: Ger. Offen., 18 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------|------|----------|------------------|----------|
| DE 10151114 | A1 | 20030417 | DE 2001-10151114 | 20011015 |
| WO 200303516 | A1 | 20030424 | WO 2002-EP11533 | 20021015 |

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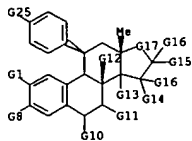
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US 2003171345 A1 20030911 US 2002-270077 20021015
 DE 2001-10151114 20011015
 US 2001-330728P 20011029

PRIORITY APPLN. INFO.:
 AB The present invention concerns 8.beta.-substituted 11.beta.-(para-substituted)phenyl-estra-1,3,5(10)-trienes, e.g., I [R2 = H, I, Br, Cl, F, OH, (un)std. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-aryl, O-heteroaryl, O-alkyl, etc.; R6, R7 = H; R6' = H, OH, (un)std. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-aryl, O-heteroaryl, O-alkyl, etc.; R7' = H, halogen, OH, (un)std. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-aryl, O-heteroaryl, O-alkyl, etc.; R8 = straight or branched-chain, optionally partly or completely halogenated C1-5-alkyl, alkenyl, ethynyl, prop-1-ynyl; R14 = H; R14R15 = bond; R15 = H; R15R16 = bond; R15', R16' = H, halogen, OH, (un)std. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-aryl, O-heteroaryl, O-alkyl, etc.; R16 = H; R17, R17' = H, H and halogen, H and O2CPh, H and OSO2H deriv.; R17R17' = :CH-halogen, O, etc.; X = O, S, bond; Y = NH2, NH(C1-10-alkyl), N(C1-10-alkyl)2, NH(C3-7-cycloalkyl)2; Z = (CH2)n; n = 1 - 12, etc.] and their pharmaceutically acceptable salts. Thus, estratrienediol II was prepd. from 3-methoxyestra-1,3,5(10)-trienone III via enol trifluoromethanesulfonylation, coupling reaction with 4-ph2COC6H4SnBu3, hydrogenolytic debenzoylation, etherification with N-(2-hydroxyethyl)piperidine, and acid-catalyzed hydrolysis. The new compds. are useful for the contraception with men and women, without affecting other estrogenic-sensitive organs like the uterus or the liver. They are suitable also for the treatment of benign or malignant proliferative illnesses of the ovary, like ovarian carcinomas and granulosa cell tumors.

L10 ANSWER 4 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MSR 1



G17 = 88

HC—G18

MPL: claim 1
NTE: and pharmacologically acceptable salts with acids

L10 ANSWER 5 OF 50 MARPAT COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 138:248958 MARPAT
TITLE: Methods and formulations of steroid compounds to modulate the immune and cellular response in various pathological states.
INVENTOR(S): Ahlem, Clarence N.; Frincke, James M.; Dos Anjos De Carvalho, Luis Daniel; Heggie, William; Prendergast, Patrick T.; Reading, Christopher L.; Thadikonda, Krupakar Paul; Vernon, Russell N.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 161 pp., Cont.-in-part of U.S. Ser. No. 675,470.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2003060425 | A1 | 20030327 | US 2001-820483 | 20010329 |
| ZA 2001003845 | A | 20020513 | ZA 2001-3845 | 20010511 |
| ZA 2001003852 | A | 20020611 | ZA 2001-3852 | 20010511 |
| WO 2002069977 | A1 | 20020912 | WO 2002-US6708 | 20020301 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TH, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003083231 A1 20030501 US 2002-87929 20020301

PRIORITY APPLN. INFO:

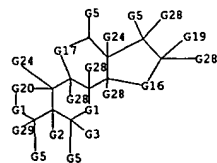
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|-----------------|----------|
| US 1998-109923P | 19981124 |
| US 1998-109924P | 19981124 |
| US 1998-110127P | 19981127 |
| US 1998-112206P | 19981215 |
| US 1999-124087P | 19990311 |
| US 1999-126056P | 19990323 |
| US 1999-137745P | 19990603 |
| US 1999-140028P | 19990616 |
| US 1999-145823P | 19990727 |
| US 1999-414905 | 19991008 |
| US 1999-161453P | 19991025 |
| US 1999-449004 | 19991124 |
| US 1999-449042 | 19991124 |
| US 1999-449184 | 19991124 |
| US 1999-461026 | 19991215 |
| US 2000-535675 | 20000323 |
| US 2000-586672 | 20000601 |
| US 2000-586673 | 20000601 |
| US 2000-675470 | 20000928 |
| US 2000-257071P | 20001220 |
| US 2001-272624P | 20010301 |
| US 2001-820483 | 20010329 |
| US 2001-323016P | 20010910 |

L10 ANSWER 5 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

US 2001-328738P 20011011
US 2001-340054P 20011101
US 2001-338015P 20011108
US 2001-340045P 20011130
US 2001-343523P 20011220

AB The invention provides compns. comprised of steroids, e.g., 16.alpha.-bromo-3.beta.-hydroxy-5.alpha.-androstane-17-one hemihydrate and one or more excipients, including compns. that comprise a liq. formulation comprising less than about 3% vol./vol. water. The compns. are useful to make improved pharmaceutical formulations. The invention also provides methods of intermittent dosing of steroid compns. such as analogs of 16.alpha.-bromo-3.beta.-hydroxy-5.alpha.-androstane-17-one and compns. useful in such dosing regimens. The invention further provides compns. and methods to inhibit pathogen replication, ameliorate symptoms assocd. with immune dysregulation and to modulate immune responses in a subject using the compns. The invention also provides methods to make and use these immunomodulatory compns. and formulations.

MSR 1A



G1 = 199



G16 = CH2 (SO)
G17 = CH2 (SO)
G20 = CH2CH2 (SO)

MPL: claim 1
NTE: additional ring, double bond, oxo and thioxo formation also claimed or pharmaceutically acceptable salts, esters, amides or prodrugs

L10 ANSWER 6 OF 50 MARPAT COPYRIGHT 2003 ACS on STN

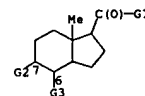
ACCESSION NUMBER: 138:170081 MARPAT
TITLE: Preparation of optically active pyridyl alcohols via optical resolution of diastereomers
INVENTOR(S): Matsuyoshi, Masato; Nojima, Masatomo; Kita, Yasuyuki
PATENT ASSIGNEE(S): Daiso Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JXXXXF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| JP 2003048896 | A2 | 20030221 | JP 2001-233119 | 20010801 |

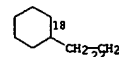
PRIORITY APPLN. INFO:
JP 2001-233119 20010801

OTHER SOURCE(S): CASREACT 138:170081
AB Optically active pyridyl alcs. trans-I [R1 = (un)substituted lower alkyl, halo; n = 3-5] are prepd. by esterification of (+,+) -trans-I with optically active carboxylic acids cis-II [X = OH, alkoxy, halo; R2, R3 = (un)substituted alkyl; R2R3 may form ring], dissolving diastereomers into water-insol. org. solvents, washing with acidic aq. solns. for sepn. of diastereomers into org. and aq. layers, and reduct. or hydrolysis of esters. (+,+) -Trans I (R1 = H, n = 4) was esterified with 3.beta.-acetoxy-Delta.5-etiocolenic acid chloride to give 90% diastereomer mixt., which was dissolved into Et2O, washed with aq. HCl, and reduced by LiAlH4 to give 68% (+) -trans-I (R1 = H, n = 4) with 77% ee from the org. layer and 90% (-) -trans-I (R1 = H, n = 4) with 93% ee from the aq. layer.

MSR 2



G2 + G3 = 18-7 22-6



MPL: claim 1
NTE: also incorporates claim 10

L10 ANSWER 7 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 137:370278 MARPAT
 TITLE: Preparation of substituted pregna-1,3,5(10)-triene derivatives for pharmaceutical use
 INVENTOR(S): Henze, Robert Henry; Setty, Sundara Katugam Srinivasasetty; Pachet, Maurice Murdoch; Gile, Michael
 PATENT ASSIGNEE(S): Marsden, John Christopher, UK: Research Institute for Medicine and Chemistry Inc.
 SOURCE: PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

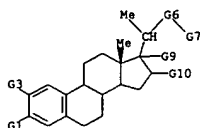
L10 ANSWER 7 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 MPL: claim 1
 NTE: total carbon carbon content of G8 does not exceed three atoms
 NTE: substitution is restricted
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002092100 | A1 | 20021121 | WO 2002-GB2210 | 20020513 |

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-290013P 20010511
 AB Pregna-1,3,5(10)-triene derivs., such as 1 (R1 = H, hydroxy protecting group; R2 = OH, CHO, alkoxy, alkenyl, alkyl, etc.; R3 = -alpha-, .beta.-Me; X = C1-3 alkylene group, bond; Y = C(R4)(R5)NR6R7; R4, R5 = H, alkyl, alkenyl and alkynyl groups, such that the total carbon content of R4 and R5 does not exceed three atoms; R6 = H, aliph. or araliph. org. group, acyl, etc.; C16-C17 = satd., unsatd.), were prepd. for a variety of therapeutic uses, such as modulating cell activity, including antiproliferative and antiangiogenic effects. Thus, pregna-1,3,5(10)-triene derivs. 11 (Y = NH2, NHC(=O)Me) were prepd. via a multistep synthetic series starting from 2-methoxy-3-([tris(1-methylethyl)silyloxy]-estra-1,3,5(10)-trien-17-one and ethyltriphenylphosphonium bromide. Pharmaceutical compns. of the prepd. compds. were discussed, but specific pharmaceutical activity testing data was not presented.

MPTR 1



L10 ANSWER 8 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 137:363699 MARPAT
 TITLE: Preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection
 INVENTOR(S): Cook, Christian John; Wu, Yinqiu; Mitchell, John Stanton
 PATENT ASSIGNEE(S): The Horticulture and Food Research Institute of New Zealand Limited, N. Z.
 SOURCE: PCT Int. Appl., 76 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

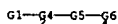
L10 ANSWER 8 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002092631 | A1 | 20021121 | WO 2002-NZ92 | 20020514 |

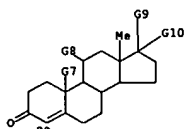
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 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: NZ 2001-511705 20010514
 AB A hapten-linker-large group conjugate for use in a rapid assay, wherein the assay is kinetic-based not approaching equil., the hapten-linker-large group conjugate being of the general formula: X - W - Y - Z wherein: X is a hapten; W is an optional thioether or ether group; Y is a linker of 10 or more atoms in length; and Z is a large group of sufficient size to provide steric hindrance with respect to the binding of X to a ligand in the absence of Y. Also provided are processes for the prodn. of the conjugates, assay methods and kits.

MPTR 1



G1 = 29



MPL: claim 1

L10 ANSWER 9 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 137:353214 MARPAT
 TITLE: Preparation of 17.alpha.-(cycloalkylcarbonyloxy)andro-
 tane-17.beta.-carbothioate derivatives as
 anti-inflammatory agents
 INVENTOR(S): Bigdadike, Keith; Jones, Paul; Payne, Jeremy John
 PATENT ASSIGNEE(S): Glaxo Group Limited, UK
 SOURCE: PCT Int. Appl., 43 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002088167 | A1 | 20021107 | WO 2002-GB1971 | 20020430 |

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

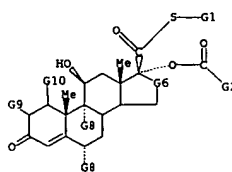
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-10578 20010430
 GB 2001-27988 20011122
 GB 2002-2442 20020202
 GB 2002-2637 20020205

AB The title compds. I [R1 = C1-6 alkyl, C1-6 haloalkyl; R2 = C3-8 cycloalkyl, C3-8 cycloalkenyl; R3 = H, Me (which may be in either the .alpha. or .beta. configuration), methylene; R4, R5 = H, halogen; dashed bond = single or double bond], and solvates thereof, were prepd. for treatment of inflammatory and allergic conditions. Thus, 6.alpha.,9.alpha.-difluoro-11.beta.,17.alpha.-dihydroxy-16.alpha.-methyl-3-oxo-androsta-1,4-diene-17.beta.-carbothioic acid was treated with cyclobutanecarbonyl chloride and the product was treated with BrCH2F to afford 6.alpha.,9.alpha.-difluoro-11.beta.-hydroxy-16.alpha.-methyl-7.alpha.-(cyclobutanecarbonyloxy)-3-oxo-androsta-1,4-diene-17.beta.-carbothioic acid S-fluoromethyl ester (II). II showed an EC50 value of <2 nM in a functional in vitro assay of glucocorticoid agonist activity.

MPTR 1

L10 ANSWER 9 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN (Continued)



G6 = 34

HC-G7

MPL: claim 1
 NTE: and solvates

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 136:6179 MARPAT
 TITLE: Preparation of triterpenoid derivatives in the
 treatment of a proliferative disorder
 INVENTOR(S): Hajduch, Marian; Sarek, Jan
 PATENT ASSIGNEE(S): Univerzita Palackeho v Olomouci, Czech Rep.;
 Univerzita Karlova v Praze; Cyclacel Limited
 SOURCE: PCT Int. Appl., 55 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2001090046 | A1 | 20011129 | WO 2001-GB2309 | 20010523 |

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BU, CP, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

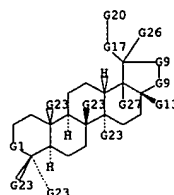
PRIORITY APPLN. INFO.: GB 2362649 A1 20011128 GB 2000-12823 20000525
 EP 1292562 A1 20030319 EP 2001-936618 20010523

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

OTHER SOURCE(S): CASREACT 136:6179
 AB Triterpenoid derive., such as I [R1 = CHOC(O)OR11, CHOC(O)OR1a, CHOC(O)OR12, CHOC(O)-Hal; X4, X5 = CH2, CH-Hal, CO, CHORib, CHOCOR1b, CHOC(O)OR11; R1-5 = H, alkyl; R7 = CO-Hal, C(O)OC(O)R1c, COOYOCOR1c, CH2OC(O)OR11; R9 = R1d, OR1d, CH2-Hal, CH2OR1d, CH2OC(O)OR11; R10 = R1e, CH-NOR1e; CN, COOR1e, CH2-Hal, CH2OR1e, etc.; R11 = hydroxyalkyl, ether, cyclic ether; R12 = alkyl, haloalkyl; dashed line = double bond or single bond; Y = (CH2)n; n = 0-5; R1a-1e = same or different groups of R1; Hal = Cl, Br, I, F], or pharmaceutically acceptable salt, were prepd. for treating a patient suffering from leukemia, cancer or other proliferative disorders. Thus, triterpenoid deriv. II was prepd. via acid hydrolysis of 17.beta.-methoxycarbonyl-28-norlup-20(29)-en-3.beta.-yl[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl] carbonate (obtained by the reaction of Me betullinate and solketal formate). II showed TC50 = 13.mu.M against human T-lymphoblastic leukemia CEM cell line.

MPTR 1

L10 ANSWER 10 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN (Continued)



G9 = 35

HC-G10

MPL: claim 1
 NTE: substitution is restricted
 or pharmaceutically acceptable salts

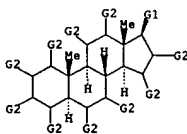
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 135:318612 MARPAT
 TITLE: A process for the preparation of 7.alpha.-hydroxy 3-amino-substituted sterols using intermediates with an unprotected 7.alpha.-hydroxy group
 INVENTOR(S): Kinney, William A.; Zhang, Xuehai; Michalak, Ronald
 PATENT ASSIGNEE(S): Geneser Corporation, USA
 SOURCE: PCT Int. Appl., 39 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001079255 | A1 | 20011025 | WO 2001-US12004 | 20010412 |
| V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1274718 A1 20030115 EP 2001-926924 20010412 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR JP 2003531148 T2 20031021 JP 2001-576852 20010412 US 2003171576 A1 20030911 US 2002-268660 20021011 PRIORITY APPLN. INFO.: US 2000-196646P 20000412 WO 2001-US12004 20010412 | | | | |

OTHER SOURCE(S): CASREACT 135:318612
 AB An efficient method for the synthesis of aminosterol compds. such as squalamine and compd. 1436 is described. A method of the invention provides for regioselective oxidn. and regioselective sulfonation of a fused ring system. The fused ring base can be, for example, a steroid ring base. The aminosterol compds. are effective as, among others, antibiotics, antiangiogenic agents and NHE3 inhibitors. Thus, squalamine and compd. 1436 intermediate I (R = SO₃H) was prepd. by the regioselective oxidn. of II (R = CH₂OH) with NaOCl and TEMPO to give II (R = CHO), and regioselective sulfonation of I (R = H).

MSTR 1



L10 ANSWER 12 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 135:318608 MARPAT
 TITLE: Preparation of 8.beta.-hydrocarbyl-substituted estratrienes for use as selective estrogens
 INVENTOR(S): Peters, Olaf; Hillisch, Alexander; Thieme, Ina; Elger, Walter; Hegele-Hartung, Christa; Kollenkirchen, Uwe; Fritzscheier, Karl-Heinrich; Patchev, Vladimic
 PATENT ASSIGNEE(S): Scheering Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 90 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

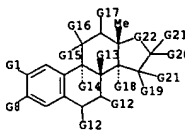
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001077139 | A1 | 20011018 | WO 2001-EP4290 | 20010412 |
| V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG DE 10019167 A1 20011018 DE 2000-10019167 20000412 EP 1272504 A1 20030108 EP 2001-931609 20010412 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR BR 2001009983 A 20030225 BR 2001-9983 20010412 BG 107173 A 20030530 BG 2002-107173 20021009 NO 2002004908 A 20021113 NO 2002-4908 20021011 US 2003176405 A1 20030918 US 2003-257288 20030401 PRIORITY APPLN. INFO.: DE 2000-10019167 20000412 US 2000-207370P 20000526 WO 2001-EP4290 20010412 | | | | |

AB The invention relates to novel 8.beta.-substituted estratrienes I [R₂ = H, halogen, straight or branched (un)satd. C1-6-alkyl, alkoxy, CF₃, sulfonamide; R₃ = alkoxy, sulfonamide, acyloxy; R₆, R₇ = H; R₆R₇ = bond; R₆, R₇ = H, halogen, alkoxy, sulfonamide; R₈ = a straight- or branched-chained, optionally partially or completely halogenated C1-5-alkyl, alkenyl, ethynyl, prop-1-ynyl; R₉ = H, straight or branched (un)satd. C1-5-alkyl; R₉R₁₁ = bond; R₁₁ = H; R₁₁R₁₂ = bond; R₁₁' = H, halogen, a straight- or branched-chained, optionally partially or completely fluoro- or chloro-C1-4-alkyl, alkoxy, alkylthio; R₁₂ = H; R₁₄ = H; R₁₄R₁₅ = bond; R₁₅ = H; R₁₅R₁₆ = bond; R₁₅', R₁₆' = H, halogen, alkoxy, sulfonamide; R₁₆ = H; R₁₇, R₁₇' = H, H and halogen, H and OCH₂PH, H and sulfonamide, alkyl and acyl or acyloxy, alkoxy and alkyl, alkoxy and acyloxy; R₁₇R₁₇' = :CH₂; :CR₂AR₂S; R₂₄, R₂₅ = halogen; R₂₄R₂₅ = O]. Thus, vinyl estradiol II was prepd. from extra-1,3,5(10)-tetraneone III in 8 steps. The inventive estratrienes are used as pharmaceutically active substances that have in vitro a higher affinity to estrogen receptor prepn. of rat prostate than to estrogen receptor prepn. of rat uterus and which in vivo preferably have a preferential effect on bone material as compared to uterus and/or a pronounced effect with respect to the stimulation of the expression of SH2a receptor and transporter. II showed a relative binding affinity for the estrogen receptor of 1 in rat uterus and of 83 in rat prostate. The invention further relates to the prodn. of these novel compounds, to their use in therapy and to the

L10 ANSWER 11 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 MPL: claim 2
 REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 pharmaceutical forms of administration that contain said novel compds. The invention further describes the use of said compds. for treating estrogen-deficiency related diseases and conditions and to the use of an 8.beta.-substituted estratriene structural part in the overall structures of compds. that are characterized by a disocon. in favor of their estrogen effect on the bone as compared to the uterus.

MSTR 1A



G22 = 74



MPL: claim 1
 REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 135:227248 MARPAT
 TITLE: Preparation of amino acid derivatives as HIV aspartyl protease inhibitors
 INVENTOR(S): Stranik, Brent Richard; Sauve, Gilles; Bouzide, Abderrahim Sevigny, Guy; Yelle, Jocelyn
 PATENT ASSIGNEE(S): Pharmacor Inc., Can.
 SOURCE: PCT Int. Appl., 158 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2001068593 | A2 | 20010920 | WO 2001-CA296 | 20010307 |
| WO 2001068593 | A3 | 20020228 | | |

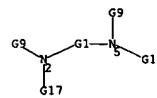
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 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 6455587 B1 20020924 US 2000-526209 20000315
 EP 1263716 A2 20021211 EP 2001-914865 20010307
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2000-526209 20000315
 WO 2001-CA296 20010307

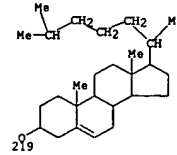
AB The invention relates to a class of amino acid derivs. I [W = (CH2)n or CH2-XX-CH2CH2, where n = 1-5, XX = O, NR5 (R5 = H, alkyl), S, SO, SO2; R6 = CO2M (M is an alkali or alk. earth metal), CO2R5, CH2OH, CONR5R6 (R6 = H, alkyl), CONHOR, Fmoc-Lys-NR6CO (Fmoc = 9-fluorenylmethoxycarbonyl), benzylloxycarbonyl or tetraazoly; R1, R3 = H, MeSO2C, alkyl, cycloalkylalkyl, arylalkyl or heterocyclylalkyl having a defined structure; R2, R4 = H, CHO, CF3, acyl or sulfonyl groups (e.g., 4-PhCH2CH2CONHC6H4SO2, camphor-10-CH2SO2, naphthyl-SO2, fluorenyl-SO2, and quinoline-SO2), arylalkyl of defined structure] or pharmaceutically acceptable ammonium salts having HIV aspartyl protease inhibitory properties. Thus, N.alpha.-isobutyl-N.alpha.-tosyl-N.epsilon.-Fmoc-L-lysine (II) was prepd. from N.epsilon.-benzyloxycarbonyl-L-lysine benzyl ester by N-alkylation using isobutyraldehyde, N-tosylation, hydrogenolysis, and protection with Fmoc-O-succinimide. Compd. II showed Ki = 4.3 nM for inhibition of HIV aspartyl protease.

MPTR 1

L10 ANSWER 13 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G18 - 219



MPL: claim 1
 NTE: and pharmaceutically acceptable ammonium salts

L10 ANSWER 14 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 135:147769 MARPAT
 TITLE: Method of increasing alertness by administration of a vomeroperin, and vomeroperin-emitting alarm devices
 INVENTOR(S): Berliner, David L.; Monti, Louis; Jennings-White, Clive L.
 PATENT ASSIGNEE(S): Pherin Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 33 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2001056577 | A1 | 20010809 | WO 2001-US3572 | 20010202 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 6544971 B1 20030408 US 2000-498830 20000204
 EP 1251856 A1 20021030 EP 2001-905412 20010202
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 JP 2003523329 T2 20030805 JP 2001-556476 20010202
 US 2000-498830 20000204
 WO 2001-US3572 20010202

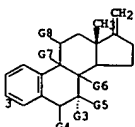
PRIORITY APPLN. INFO.: US 2000-498830 20000204
 WO 2001-US3572 20010202

AB A method of increasing alertness in an individual by administering an effective amt. of an alertness-increasing vomeroperin to the individual and an alarm device that, when activated, emits an alertness-increasing vomeroperin. The method and device are esp. useful in increasing alertness in individuals who are not readily responsive to usual external stimuli.

MPTR 1

G1-G2

G2 - 3



MPL: claim 1

L10 ANSWER 14 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

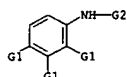
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 135:66070 MARPAT
 TITLE: Preparation and use of a composition based on lipid lamellar vesicles incorporating an aminophenol derivative
 INVENTOR(S): Chevalier, Veronique; Simonnet, Jean Thierry; Le Verge, Danielle
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Fr. Demande, 27 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

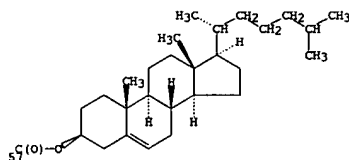
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| FR 2796838 | A1 | 20010202 | FR 1999-9663 | 19990726 |
| FR 2796838 | B1 | 20030523 | | |

PRIORITY APPLN. INFO.: FR 1999-9663 19990726
 AB The present invention concerns a compn. comprising vesicles formed from phases of lamellar lipids dispersed in an aq. phase, whereby the lamellar phases incorporate at least one aminophenol deriv. comprising a fatty acid chain with a polar head bound to a nitrogen atom of said aminophenol. The vesicles may have oily cores (oleosomes) or aq. cores (niosomes or liposomes). The aminophenol deriv. preferred is N-cholesteryloxy-carbonyl-4-para-aminophenol. The compn. is suitable for use in cosmetics.

MFTR 1



G2 = 57



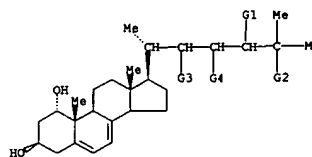
MPL: claim 1

L10 ANSWER 16 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 134:252525 MARPAT
 TITLE: Preparation and formulation of active vitamin D derivatives
 INVENTOR(S): Tachibana, Yoji
 PATENT ASSIGNEE(S): Nissin Flour Milling Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JXOOUAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| JP 2001089442 | A2 | 20010403 | JP 1999-265363 | 19990920 |
| | | | JP 1999-265363 | 19990920 |

PRIORITY APPLN. INFO.:
 AB Vitamin D derivs. of formula I (R1, R2 = H, Et, Pr, Bu; R3 = H, OH) are prepd. as bone d. improvers, differentiation inducers, cell multiplication inhibitors, and immunoregulators without causing hypercalcemia. Thus, II was prepd. and shown to be effective in the vitamin D receptor affinity test with a B/BO 50% of 0.01, and was tested against HL-60 cells in the NBT appraisal test. Pharmaceutical compns. contg. I are described.

MFTR 2



MPL: claim 4

L10 ANSWER 17 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 133:351719 MARPAT
 TITLE: Amphiphilic cyclodextrins, their preparation and use for solubilizing and transporting hydrophobic molecules in aqueous media
 INVENTOR(S): Auzely-Velty, Rachel; Perly, Bruno; Djedaini-Pillard, Florence
 PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.
 SOURCE: PCT Int. Appl., 51 pp.
 CODEN: PIXXDZ
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2000066635 | A1 | 20001109 | WO 2000-FR1102 | 20000426 |

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

| | | | | |
|------------|----|----------|----------------|----------|
| FR 2792942 | A1 | 20001103 | FR 1999-5460 | 19990429 |
| FR 2792942 | B1 | 20010608 | | |
| EP 1177217 | A1 | 20020206 | EP 2000-922751 | 20000426 |

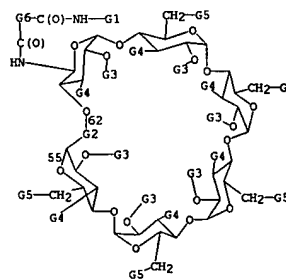
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: JP 2000-615663 20000426
 FR 1999-5460 19990429
 WO 2000-FR1102 20000426

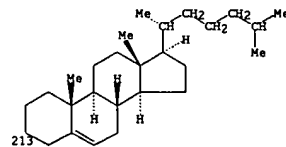
AB Cyclodextrin derivs. of formula I (R1 = steroid residue; R2 = (un)substituted alkyl or aryl; R3 = H, R2; R4 = OR2, or 1 R4 = NHCO(CH2)mCONHR1) are useful for transporting hydrophobic mols. for pharmaceutical or cosmetic uses, by forming organized systems in an aq. medium, independently or assocd. with phospholipids. Thus, 6-azido-6-deoxy-beta-cyclodextrin was methylated on the OH groups in the 2 and 6 positions to a tridecamethyl ether, which was converted to the amine, treated with succinic anhydride, and the product amidated with cholest-5-en-3.alpha.-ylamine to give I (R1 = cholest-5-en-3.alpha.-yl, R2 = Me, R3 = H, R4 = OMe, m = 2, n = 6) (II). An aq. soln. of II at a concn. above its crit. micelle concn. formed spherical nanoparticles of diam. 60 .ANG., which could form inclusion compds. with fatty acids and other hydrophobic mols.

MFTR 1

L10 ANSWER 17 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G1 = 213

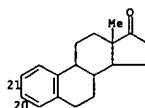


MPL: claim 1
 NTE: substitution is restricted

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCSSION NUMBER: 133:329573 MARPAT
 TITLE: Cyclic compounds for cell cycle arrest
 INVENTOR(S): Reed, Michael John; Potter, Barry Victor Lloyd
 PATENT ASSIGNEE(S): Steris Limited, UK
 SOURCE: PCT Int. Appl., 78 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

L10 ANSWER 18 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 1
 NTE: or pharmaceutically acceptable salts

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000066095 | A2 | 20001109 | WO 2000-GB1661 | 20000428 |
| WO 2000066095 | A3 | 20010809 | | |
| W: AE, AG, AL, AM, AT, AU, A2, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1173182 | A2 | 20020123 | EP 2000-929660 | 20000428 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002543114 | T2 | 20021217 | JP 2000-614980 | 20000428 |
| ZA 200108363 | A | 20021011 | ZA 2001-8363 | 20011011 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | GB 1999-10166 | 19990430 |
| | | | US 1999-139520P | 19990616 |
| | | | GB 2000-2113 | 20000128 |
| | | | WO 2000-GB1661 | 20000428 |

AB There is provided use of a cyclic compd., or a pharmaceutically active salt thereof, in the manuf. of a medicament to prevent and/or inhibit and/or arrest cell cycling, wherein the cyclic compd. comprises at least one ring, wherein Group I and Group II, independently of each other, are attached to a ring of the cyclic compd., wherein Group I is a hydrocarbyl or an oxyhydrocarbyl group; and wherein Group II is (R) (2) (O)(X)(Y) [X = P, S; when X = P, Y is :O or S, Z = OH and R = hydrocarbyl, H; when X = S, Y, Z = :O, R = hydrocarbyl, N(R1)(R2); R1, R2 = H, hydrocarbyl]. Prepn. and activity of e.g. 2-methoxyestrone 3-O-sulfamate against breast cancer cells are described.

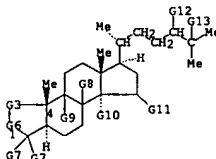
MFTR 1



G1 = 21-1 20-3

L10 ANSWER 19 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCSSION NUMBER: 133:177347 MARPAT
 TITLE: Unsaturated cholestane derivatives and their use for the preparation of meiosis regulating medicaments
 INVENTOR(S): Blume, Thorsten; Esperling, Peter; Kuhnke, Joachim; Hegeler-Hartung, Christa; Lessl, Monika
 PATENT ASSIGNEE(S): Schering A.-G., Germany
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

L10 ANSWER 19 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G3 = 53-4 54-1



G4 = 56



G6 = CHO
 DER: or esters
 MPL: claim 1
 NTE: substitution is restricted

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000047604 | A1 | 20000817 | WO 2000-EP1074 | 20000209 |
| W: AE, AL, AM, AT, AU, A2, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2359687 | AA | 20000817 | CA 2000-2359687 | 20000209 |
| BR 200008065 | A | 20011106 | BR 2000-8065 | 20000209 |
| EP 1150993 | A1 | 20011107 | EP 2000-910664 | 20000209 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002536456 | T2 | 20021029 | JP 2000-598521 | 20000209 |
| NO 2001003901 | A | 20010810 | NO 2001-3901 | 20010810 |
| ZA 2001007387 | A | 20021206 | ZA 2001-7387 | 20010906 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | EP 1999-250040 | 19990210 |
| | | | WO 2000-EP1074 | 20000209 |

AB This invention relates to pharmaceutically active unsatd. cholestane derivs., (I) [R1 = H, C2-6 (un)substituted alkyl, substituted Ph, CN, CH2-NH-CO-A (A = C1-8 (un)substituted alkyl etc.); R2 = H, alkyl, alkenyl, hydroxyalkyl etc; R3 = H, R3R6 = bond double; R4, R7 = H, Me; R5 = H or R2R5 = benzylidene etc.; R8R9 or R8R10 = bond double; R9, R10 = H, R10R11 = bond double; R12, R13 = H or R12R13 = bond double] to pharmaceutical compns. comprising them as active substances and to the use of these novel compds. for the prepn. of medicaments. Thus, I (R1 = alpha-CN; R2, R5, R12, R13 = H; R3R6, R8R9, R10R11 = bond double; R4, R7 = Me) was prepd. starting from I (R1 + R2 = R3R6, R8R9, R10R11 = bond double; R5, R12, R13 = H; R4, R7 = Me) via cyanation. More particularly it has been found that the unsatd. cholestane derivs. of the invention can be used for regulating meiosis.

MFTR 1

L10 ANSWER 20 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 133:177158 MARPAT
 TITLE: Preparation of cyclic substituted fused pyrrolocarbazoles and isoindolones with protein kinase inhibiting activity for pharmaceutical use
 INVENTOR(S): Hudkins Robert L.; Reddy, Dandu; Singh, Jasbir; Stripathy, Rabindranath; Underiner, Theodore L.
 PATENT ASSIGNEE(S): Cephalon, Inc., USA
 SOURCE: PCT Int. Appl., 131 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000047583 | A1 | 20000817 | WO 2000-US3476 | 20000211 |
| V: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2359772 | AA | 20000817 | CA 2000-2359772 | 20000211 |
| EP 1165562 | A1 | 20020102 | EP 2000-911759 | 20000211 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR 200008056 | A | 20020409 | BR 2000-8056 | 20000211 |
| JP 2003529537 | T2 | 20031007 | JP 2000-598503 | 20000211 |
| HR 2001000583 | A1 | 20020831 | HR 2001-583 | 20010807 |
| NO 2001003887 | A | 20011011 | NO 2001-3887 | 20010809 |
| BG 105890 | A | 20020628 | BG 2001-105890 | 20010911 |
| PRIORITY APPLN. INFO.: US 1999-119834P 19990212 | | | | |
| US 2000-500849 20000210 | | | | |
| US 2000-53476 20000211 | | | | |

AB Fused pyrrolocarbazoles and isoindolones, such as I [R1 = H, alkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl; R3-6 = H, CN, CF3, OH, CH2OH, halogen, aryl, heteroaryl, acyl, acyloxy, amino, etc.; Q = O, S, NR7; W = CR8R9; X, Y = H2, O; R7 = H, alkyl, heterocyclylalkyl, etc.; R8, R9 = H, OH, cycloalkyl, cycloalkylmethyl, heterocyclyl, heterocyclylalkyl, etc.], were prepd. for use as agents for the regulation of protein kinase and for the treatment of prostate disorders, neoplasia, rheumatoid arthritis, pulmonary fibrosis, etc. Thus, II (R = oxiranylmethyl) was prepd. in 71% yield by via reaction of (4,4'-)glycidyl mesylate and Rink's acid resin bound 6,7,12,13-tetrahydro-5H-indeno[2,1-a]pyrrolo[3,4-c]carbazol-5-one. The prepd. compds. were tested for inhibitory activity against a variety of protein kinases, such as trkA tyrosine kinase, vascular endothelial growth factor receptor kinase, protein kinase C, etc.

MYSTR 1

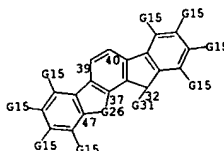
L10 ANSWER 20 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G26 = 119-47 120-37



G28 = CH2
G49 = 39-2 40-4 32-45



MPL: claim 1
 NTE: substitution is restricted
 NTE: additional ring formation also claimed

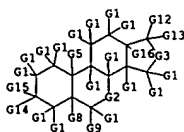
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 21 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 133:34421 MARPAT
 TITLE: Use of 17-ketosteroid compounds and derivatives, metabolites, and precursors thereof in treatment of toxoplasmosis and cryptosporidiosis
 INVENTOR(S): Ahlem, Clarence Nathaniel; Frincke, James Martin; Prendergast, Patrick T.; Thadikonda, Krupakar Paul
 PATENT ASSIGNEE(S): Hollis-Eden Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 87 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 9
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000032176 | A2 | 20000608 | WO 1999-US28080 | 19991124 |
| WO 2000032176 | A3 | 20001207 | | |
| V: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| ZA 2001003845 | A | 20020513 | ZA 2001-3845 | 20010511 |
| PRIORITY APPLN. INFO.: US 1998-110127P 19981127 | | | | |
| US 1999-124087P 19990311 | | | | |
| US 1999-126056P 19990323 | | | | |

AB 17-Keto steroids and related compds., e.g. 16.alpha.-bromoepiandrosterone (I), and their pharmaceutically acceptable salts are used to treat infections with Toxoplasma or Cryptosporidium and to ameliorate or reduce symptoms assoc. with such infections. Thus, a suspension was prepd. contg. 50 mg I/mL in PEG-300 25, EtOH 12.5, benzyl benzoate 5, and propylene glycol 5t. I.v. administration of the steroids is preferred. The keto steroids may also be used to treat, or to ameliorate symptoms assoc. with, retroviral infections or malaria in humans.

MYSTR 1A



G2 = 42

L10 ANSWER 21 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G3 = 45



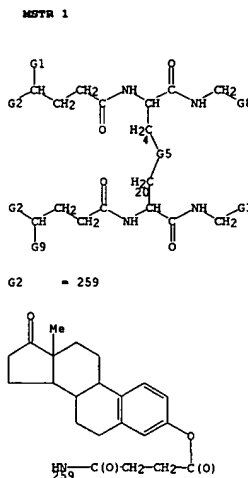
MPL: claim 1
 NTE: further derivatization also claimed

L10 ANSWER 22 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 133:12779 MARPAT
 TITLE: Hexapeptide with the stabilized disulfide bond and derivatives thereof regulating metabolism, proliferation, differentiation and apoptosis
 INVENTOR(S): Kozhemyakin, Leonid Andreevich; Kozhemyakin, Andrei Leonidovich; Balazovsky, Mark Borisovich
 PATENT ASSIGNEE(S): Zakrytoe Aktsionerное Obschestvo "vam", Russia
 SOURCE: PCT Int. Appl., 127 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000031120 | A2 | 20000602 | WO 1999-RU453 | 19991119 |
| WO 2000031120 | A3 | 20001026 | | |
| V: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| RU 2144374 | C1 | 20000120 | RU 1998-120753 | 19981123 |
| RU 2153350 | C1 | 20000727 | RU 1999-105585 | 19990326 |
| EP 1131340 | A2 | 20010912 | EP 1999-968474 | 19991119 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002538079 | T2 | 20021112 | JP 2000-583947 | 19991119 |
| PRIORITY APPLN. INFO.: RU 1998-120753 19981123 RU 1999-105585 19990326 WO 1999-RU453 19991119 | | | | |

AB The present invention relates to a composite regulating metab., proliferation, differentiation and apoptotic mechanisms and applicable for the treatment for a variety of medical conditions, the composite comprising and oxidized glutathione-based compd., which has a disulfide bond, and a metal material, in particular where the metal is either platinum or palladium. The oxidized glutathione-based compd. and metal material can be present in a ratio of 3000:1 and preferably 1000:1. The oxidized glutathione-based compd. can be oxidized glutathione itself or salts or derive. A feature of the invention is that the composite has a more stabilized disulfide bond than the oxidized glutathione-based compd. itself that significantly enhanced the biol.-pharmacol. activity of the composite and increased ability thereof for chem. modification resulting in new products possessing new therapeutic effects. Methods for prepg. the composite are provided, such methods being beneficial in that the composite is provided in high yields and at high purity. Methods for treatment of oncol., infectious, immunolog., hematol., ischemic, neurodegenerative, metab. disorders and endocrine diseases with the composites of the present invention are also disclosed. For example, the composite compd. bis[1-(phenylalanyl)-gamma.-L-glutamyl]-L-cystinyl-bis-glycine disodium salt and cisplatin was prepd. in a yield of 80% using glutathione and N-hydroxymethylbenzamide as starting materials and H2O2 as

L10 ANSWER 22 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 an oxidizing agent.



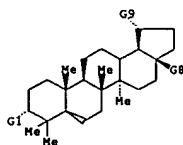
DER: and salts and metal complexes
 MPL: claim 9
 NTE: also incorporates claims 27
 NTE: additional bridging also claimed

L10 ANSWER 23 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 132:112756 MARPAT
 TITLE: Compositions which contain triterpenes for regulating hair growth
 INVENTOR(S): Bradbury, James Barton; Schafer, Shari Joy; Kaczvinsky, Joseph Robert, Jr.; Bailey, Dorothy; Gale, Celeste Dawn
 PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
 SOURCE: PCT Int. Appl., 57 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000003748 | A2 | 20000127 | WO 1999-US16099 | 19990716 |
| WO 2000003748 | A3 | 20000615 | | |
| V: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2337848 | AA | 20000127 | CA 1999-2337848 | 19990716 |
| AU 9951062 | A1 | 20000207 | AU 1999-51062 | 19990716 |
| EP 1119338 | A2 | 20010801 | EP 1999-935620 | 19990716 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002520375 | T2 | 20020709 | JP 2000-559882 | 19990716 |
| PRIORITY APPLN. INFO.: US 1998-93193P 19980717 WO 1999-US16099 19990716 | | | | |

AB The present invention relates to compns. contg. (1) 0.0001-99.9 % of certain compds. selected from the group consisting of lupane triterpenes, derivs. of lupane triterpenes, derivs. of oleanane triterpenes, derivs. of ursane triterpenes, and salts and mixts. thereof, and (2) a vehicle. A hair tonic soln. contained betulinic acid 5, Tween-20 1, isopropanol 47, propylene glycol 28.2, and dimethylisocrotonide 18.8 %.

MFSTR 1



MPL: claim 1

L10 ANSWER 23 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

L10 ANSWER 24 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 130:202922 MARPAT
 TITLE: Energy-sensitive resist material and a process for device fabrication using the energy-sensitive resist material
 INVENTOR(S): Chandross, Edwin Arthur; Houlihan, Francis Michael; Nalamasu, Omkaram; Reichmanis, Elsa; Wallow, Thomas Ingolf
 PATENT ASSIGNEE(S): Lucent Technologies Inc., USA
 SOURCE: U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 803,703.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

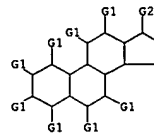
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 5879857 | A | 19990309 | US 1997-813732 | 19970307 |
| US 5843624 | A | 19981201 | US 1997-803703 | 19970221 |
| EP 880074 | A1 | 19981125 | EP 1998-301562 | 19980303 |
| EP 880074 | B1 | 19991027 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 10307401 | A2 | 19981117 | JP 1998-57221 | 19980309 |
| US 5998099 | A | 19991207 | US 1998-83168 | 19980522 |

PRIORITY APPLN. INFO.:

AB A process for device fabrication and an energy-sensitive resist material used in the process are disclosed. The resist material contains a polymer in combination with a dissoln. inhibitor and a photoacid generator. The dissoln. inhibitor is the condensation reaction product of a satd. polycyclic hydrocarbon compd. with at least one hydroxy substituent and a difunctional satd. linear, branched, or cyclic hydrocarbon compd. wherein the functional groups are either carboxylic acid or carboxylic acid chloride groups. The condensation product has at least two polycyclic moieties. The polymer optionally has acid-labile groups pendant thereto which significantly decrease the soly. of the polymer in a soln. of aq. base. A film of the resist material is formed on a substrate and exposed to a delineating radiation. The radiation induces a chem. change in the resist material rendering the exposed resist material substantially more sol. in an aq. base soln. than the unexposed portion of the resist material. The image introduced into the resist material is developed using conventional techniques, and the resulting pattern is then transferred into the underlying substrate.

MPTR 1

L10 ANSWER 24 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 4
 NTE: also incorporates claim 9

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

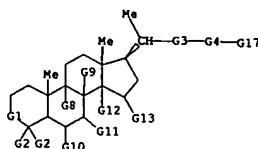
L10 ANSWER 25 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 130:52629 MARPAT
 TITLE: Preparation of 17.beta.-allyloxy(thio)alkylandrostande derivatives for the modulation of meiosis
 INVENTOR(S): Leemhuis, Johannes Antonius Joseph; Van der Louw, Jaap; Groen, Marinus Bernard
 PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.
 SOURCE: PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9855498 | A1 | 19981210 | WO 1998-EP3191 | 19980528 |
| R: AM, AU, BB, BG, BR, CA, CN, CZ, DE, EE, GE, HU, ID, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TQ, RW, GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9885353 | A1 | 19981221 | AU 1998-85353 | 19980528 |
| EP 988312 | A1 | 20000329 | EP 1998-936293 | 19980528 |
| EP 988312 | B1 | 20020403 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| BR 9809733 | A | 20001003 | BR 1998-9733 | 19980528 |
| JP 2002502404 | T2 | 20020122 | JP 1999-501445 | 19980528 |
| AT 215555 | E | 20020415 | AT 1998-936293 | 19980528 |
| NO 9905935 | A | 20000203 | NO 1999-5935 | 19991203 |
| US 6262282 | B1 | 20010717 | US 1999-445202 | 19991203 |
| | | | EP 1997-201691 | 19970604 |
| | | | WO 1998-EP3191 | 19980528 |

PRIORITY APPLN. INFO.:

AB 17.beta.-Allyloxy(thio)alkyl-androstande deriva. of formula I [R1 = (substituted) OH, OSO3H, etc.; R2-R5 = H, alkyl; R6-R8 = H, Ph, halo; R6R7, R7R8 = cycloalkyl; n = 0-2; X = O, S, S(O), SO2] are prepd. The compds. of the invention have meiosis activating activity and can be used for the control of fertility. Thus, II was prepd. from 3.beta.-hydroxypregn-5-en-20-one and 4-bromo-2-methyl-2-butene in many steps. II showed 100% germinal vesicle breakdown in oocytes.

MPTR 1



L10 ANSWER 25 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MPTR 1

DER: or pharmaceutically acceptable salts
 MPL: claim 1

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

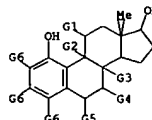
L10 ANSWER 26 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 130:52627 MARPAT
 TITLE: Non-estrogenic estradiol derivatives with an antioxidant activity
 Dreescher, Peter; Menzenbach, Bernd; Romer, Wolfgang; Schneider, Brigitte; Elger, Walter; Kaufmann, Gunter
 INVENTOR(S): Jenapharm GmbH & Co., Ltd., Germany
 PATENT ASSIGNEE(S): PCT Int. Appl., 30 pp.
 SOURCE: CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 9855496 | A1 | 19981210 | WO 1998-DE1392 | 19980520 |
| V: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LA, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TH, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| DE 19723794 | A1 | 19981210 | DE 1997-19723794 | 19970606 |
| AU 9884303 | A1 | 19981221 | AU 1998-84303 | 19980520 |
| EP 986573 | A1 | 20000322 | EP 1998-934761 | 19980520 |
| EP 986573 | B1 | 20021009 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, NO | | | | |
| JP 2002510295 | T2 | 20020402 | JP 1999-501255 | 19980520 |
| AT 225800 | E | 20021015 | AT 1998-934761 | 19980520 |
| ES 2185187 | T3 | 20030416 | ES 1998-934761 | 19980520 |
| US 6436917 | B1 | 20020820 | US 1998-92289 | 19980605 |
| US 2002065258 | A1 | 20020530 | US 2001-990517 | 20011121 |
| PRIORITY APPLN. INFO.: DE 1997-19723794 19970606 WO 1998-DE1392 19980520 US 1998-92289 19980605 | | | | |

AB New non-estrogenic estradiol derivs. I (R1 = H, OH; R2, R3 = H, Me; dashed line = one or two double bonds), whereby the hydroxy group can exist as an ether, ester or sulfamate except for 4-methylestra-1,3,5(10)-triene-1,17,β-diol, and II [Z = (CH2)nAPh; n = 0, 1; when n = 0, 1 A = bond; when n = 1, A = O, S, Se; Ph = (un)substituted phenyl] whereby the hydroxy group can exist as an ether, ester or sulfamate, with antioxidant activity are disclosed. These estradiol derivs., which have no estrogenic effect but a high antioxidant effect, are potentially useful as non-estrogenic antioxidants, in particular for postmenopausal women and for men; moreover, the disclosed compds. are potential aromatase and sulfatase inhibitors. Thus, I (R1 = R2 = H, R3 = 4-Me, dashed lines = single bonds, C(17) = β-OH) showed 0.04 % binding to estrogen receptor but lipid peroxidn. inhibition (IC50 = 1.7 μm.mol/L), 22.26% inhibition of Fe(II)-autoxidn. and 19.23% stimulation of Fe(III) redn.

MSR 1.

L10 ANSWER 26 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



DER: and ethers, esters or sulfamates
 MPL: claim 1
 NTE: substitution is restricted

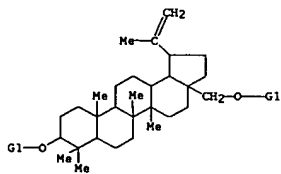
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 27 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 130:52599 MARPAT
 TITLE: synthesis and antitumor activity of betulinol derivatives and monoclonal antibody conjugates
 Bomsteyn, Arkady L.; Rathnam, Premila; Saxena, Brij B.
 INVENTOR(S): Cornell Research Foundation, Inc., USA
 PATENT ASSIGNEE(S): PCT Int. Appl., 56 pp.
 SOURCE: CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9855497 | A1 | 19981210 | WO 1998-US11456 | 19980603 |
| V: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9878135 | A1 | 19981221 | AU 1998-78135 | 19980603 |
| EP 988311 | A1 | 20000329 | EP 1998-926258 | 19980603 |
| R: DE, FR, GB, IT | | | | |
| US 2003036540 | A1 | 20030220 | US 2002-212576 | 20020802 |
| PRIORITY APPLN. INFO.: US 1997-48621P 19970604 US 1998-89894 19980603 WO 1998-US11456 19980603 | | | | |

AB Syntheses of betulinol derivs. (I) (X, Y1 = independently OH, alkoxy, alkanoyloxy, -peptide-NHNH-C(O)-antibody-OH moiety) and betulinol-antibody conjugates (II) (A1 = 1-peptide-NHNH-CH, 1-peptide-NHNH) are disclosed.

MSR 1



MPL: claim 1

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 28 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 129:81885 MARPAT
 TITLE: Processes for preparation of 9,11-epoxy steroids and their intermediates
 INVENTOR(S): Ng, John S.; Liu, Chin; Anderson, Dennis K.; Lawson, Jon P.; Wiecezorek, Joseph Kunda, Sastry A.; Letendre, Leo J.; Pozzo, Mark J.; Sing, Yuen-lung L.; Wang, Ping T.; Yonan, Edward E.; Weier, Richard M.; Kowar, Thomas R.; Baez, Julio A.; Erb, Bernhard
 PATENT ASSIGNEE(S): G.D. Searle & Co., USA; Ng, John S.; Liu, Chin; Anderson, Dennis K.; Lawson, Jon P.; Wiecezorek, Joseph Kunda, Sastry A.; Letendre, Leo J.; Pozzo, Mark J.; et al.
 SOURCE: PCT Int. Appl., 543 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9825948 | A2 | 19980618 | WO 1997-US23090 | 19971211 |
| WO 9825948 | A3 | 19981015 | | |
| V: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| ZA 9711038 | A | 19990125 | ZA 1997-11038 | 19971209 |
| AU 9857983 | A1 | 19980703 | AU 1998-57983 | 19971211 |
| AU 733559 | B2 | 20010517 | | |
| EP 944644 | A2 | 19990929 | EP 1997-954126 | 19971211 |
| EP 944644 | B1 | 20021002 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| CN 1253564 | A | 20000517 | CN 1997-181737 | 19971211 |
| BR 9714510 | A | 20001128 | BR 1997-14510 | 19971211 |
| NZ 336004 | A | 20010427 | NZ 1997-336004 | 19971211 |
| JP 2001509792 | T2 | 20010724 | JP 1998-527032 | 19971211 |
| EP 1148061 | A2 | 20011024 | EP 2001-111209 | 19971211 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| EP 1223174 | A2 | 20020717 | EP 2002-7309 | 19971211 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| AT 225367 | E | 20021015 | AT 1997-954126 | 19971211 |
| NZ 510556 | A | 20021025 | NZ 1997-510556 | 19971211 |
| ES 2186017 | T3 | 20030501 | ES 1997-954126 | 19971211 |
| ZA 9805088 | A | 19990611 | ZA 1998-5088 | 19980611 |
| NO 9902825 | A | 19990729 | NO 1999-2825 | 19990610 |
| AU 747959 | B2 | 20020530 | AU 2000-18440 | 20000221 |
| US 2002038021 | A1 | 20020328 | US 2000-732208 | 20001207 |
| US 2002045746 | A1 | 20020418 | US 2000-732209 | 20001207 |
| US 2003055274 | A1 | 20030320 | US 2002-112355 | 20020329 |
| US 6610844 | B2 | 20030826 | | |
| PRIORITY APPLN. INFO.: US 1996-33315P 19961211 US 1997-49388P 19970611 US 1995-8455P 19951211 US 1996-763910 19961211 EP 1997-954126 19971211 | | | | |

L10 ANSWER 28 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
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 US 1999-246204 19990208
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 US 1999-169556P 19991208
 US 1999-169608P 19991208
 US 1999-169639P 19991208
 US 1999-169682P 19991208
 US 1999-169683P 19991208
 US 1999-169690P 19991208
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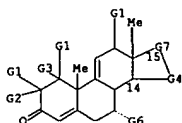
L10 ANSWER 28 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 G7 = 39



DER: or salts
 MPL: claim 1
 NTE: additional ring formation also claimed

OTHER SOURCE(S): CASREACT 129:81885
 AB Multiple novel reaction schemes, novel process steps and novel intermediates are provided for the synthesis of epoxymekrenone and other compds. of formula (I) wherein: -A- represents the group -CHR4-CHR5- or -CRA-CR5-, R3, R4 and R5 are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, aryloxy; R1 represents an alpha-oriented lower alkoxy carbonyl or hydroxyalkyl radical; -B-B- represents the group -CHR6-CHR7- or an alpha- or beta-oriented group (II), where R6 and R7 are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy; and R8 and R9 are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano and aryloxy, or R8 and R9 together comprise a carbocyclic or heterocyclic ring structure, or R8 or R9 together with R6 or R7 comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring.

MYTR 1



G4 = 26-14 27-15



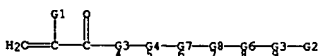
L10 ANSWER 29 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 ACCESSION NUMBER: 128:295176 MARPAT
 TITLE: Preparation of monomers useful in the production of liquid-crystalline polymers
 INVENTOR(S): Gailberger, Michael; Strelzyk, Katja; Grundig, Petra; Barth, Anne; Dannenhauer, Fritz; Strohsiegl, Peter; Stohr, Andreas
 PATENT ASSIGNEE(S): Daimler-Benz A.-G., Germany
 SOURCE: Ger. Offen., 10 pp.
 CODEN: GVXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

L10 ANSWER 29 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 MPL: claim 16
 NTE: alkylene in G3 may be interrupted by oxygen atoms
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

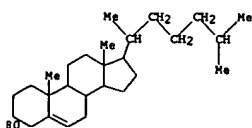
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| DE 19643048 | A1 | 19980423 | DE 1996-19643048 | 19961018 |
| EP 837054 | A2 | 19980422 | EP 1997-116765 | 19970926 |
| EP 837054 | A3 | 19990414 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 10182556 | A2 | 19980707 | JP 1997-320232 | 19971017 |
| US 6049000 | A | 20000411 | US 1997-953976 | 19971020 |
| US 6423865 | B1 | 20020723 | US 2000-516511 | 20000301 |
| US 6313326 | B1 | 20011106 | US 2000-526756 | 20000316 |
| PRIORITY APPLN. INFO.: DE 1996-19643048 19961018 US 1997-953976 19971020 | | | | |

AB The title monomers, of specified structure and bearing (meth)acrylate groups and vinyl ether, epoxy, or azide groups, are prepd. Adding 21 mmol MeSO2Cl dropwise to 21 mmol 4-[2-(vinylloxy)ethoxy]benzoic acid and 21 mmol Et3N in 1,2-dimethoxyethane stirred at .ltoreq.-25.degree., stirring for 1 h at -30.degree., adding 21 mmol 4-[[6-(acryloyloxy)hexyl]oxy]phenol, 2 mmol 4-(dimethylamino)pyridine, and 100 mg BHT, and stirring at 0-5.degree. for 3 h gave 78% 4-[[6-(acryloyloxy)hexyl]oxy]phenyl 0-[2-(vinylloxy)ethoxy]benzoate (I). AIBN-initiated polymn. of I in THF in the presence of 4 mol% ClO4H2SH at 60.degree. for 48 h gave an oligomer (no.-av. mol. wt. .apprx.20,000) showing a nematic phase with a clear point at .apprx.100.degree..

MYTR 1

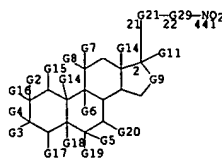


G2 = 80



L10 ANSWER 30 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 128:294939 MARPAT
 TITLE: Preparation of nitrate esters of corticoid compounds and pharmaceutical applications thereof
 INVENTOR(S): Del Soldato, Piero
 PATENT ASSIGNEE(S): Nicom S.A., Fr.; Del Soldato, Piero
 SOURCE: PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

L10 ANSWER 30 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G9 = 259

H₂₅₉-G10

DER: or esters or salts
 MPL: claim 1
 NTE: additional ring fusion also claimed

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9815568 | A2 | 19980416 | WO 1997-EP5426 | 19971002 |
| WO 9815568 | A3 | 19980618 | | |
| W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9747803 | A1 | 19980505 | AU 1997-47803 | 19971002 |
| AU 719250 | B2 | 20000504 | | |
| EP 929565 | A2 | 19990721 | EP 1997-910409 | 19971002 |
| EP 929565 | B1 | 20020529 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, SI, LT, FI, RO | | | | |
| BR 9711586 | A | 19990824 | BR 1997-11586 | 19971002 |
| CN 1253563 | A | 20000517 | CN 1997-180284 | 19971002 |
| JP 2001501637 | T2 | 20010206 | JP 1998-517154 | 19971002 |
| AT 218142 | E | 20020615 | AT 1997-910409 | 19971002 |
| RU 2186781 | C2 | 20020810 | RU 1999-108661 | 19971002 |
| ES 2177952 | T3 | 20021216 | ES 1997-910409 | 19971002 |
| US 6610676 | B1 | 20030826 | US 1999-269729 | 19990402 |
| KR 2000048911 | A | 20000725 | KR 1999-702942 | 19990403 |
| PRIORITY APPLN. INFO.: | | | | |
| IT 1996-WI2048 19961004 | | | | |
| WO 1997-EP5426 19971002 | | | | |

AB The title compds. of the general formula B-X1-NO2 or their esters or salts, where B has structure I where there may be substituents in place of the H in the CH group or two hydrogens H2 in the CH2 group shown in the general formula; R and R1 are equal or different one from the other and may be hydrogen or linear or branched alkyls having from 1 to 4 carbon atoms, preferably R = R1 = CH3; B being a corticosteroid residue; R2 is -(CO-L)x-(X)y- where x and y are integers equal or different one from the other and equal to 0 or 1; where L is a bivalent connecting group; X is equal to X2 where X2 = O, NH, NR3 where R3 is a linear or branched alkyl having from 1 to 10 C atoms; or equal to X3 where X3 is equal to OH, CH3, Cl, N(CH2CH3)2, SCH2F, SH; X1 is a bivalent connecting bridge YO where Y is a C1-C20 alkylene were prepd. Thus, hydrocortisone was treated with 4-chlorobutanoyl chloride followed by treatment with AgNO2 to give the nitro deriv. II. II had a 62% antiarthritic activity in rats at 10 mg/kg, but did not affect cardiovascular parameters.

MPTR 1

L10 ANSWER 31 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 128:205039 MARPAT
 TITLE: Preparation and biological activity of antimicrobial steroidal amino compounds
 INVENTOR(S): Schoenecker, Bruno; Wyrwa, Ralf; Moellmann, Ute; Krieg, Reimar; Dubs, Manuela
 PATENT ASSIGNEE(S): Friedrich-Schiller-Universitaet Jena, Germany; Hans-Knoell-Institut fuer Naturstoffforschung
 SOURCE: Ger. Offen., 20 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

L10 ANSWER 31 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|------------------|----------|
| DE 19633206 | A1 | 19980219 | DE 1996-19633206 | 19960817 |
| DE 19633206 | C2 | 20010329 | | |

PRIORITY APPLN. INFO.:

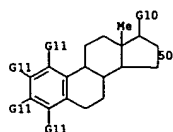
DE 1996-19633206 19960817

AB Steroidal amines [RNR1R5aCR2R3R4]a+ Aa- [a = 0, 1; R = steroid, cholanyl, cardenolide, bufadienolide deriv.; R1 - R5 = H, alkyl; A = anion; when a = 0: R1R2 = bond; R3 = (CH2)xR6, x .gtoreq. 0; R6 = (un)substituted Ph, pyridyl, pyrrolyl, furyl, thienyl, ferrocenyl; R4 = H, alkyl, R3; or when a = 1: R1 = H, alkyl, aryl, acyl, (CH2)yR3, y .gtoreq. 0; R2 = H; R3 = (CH2)xR6; R4 = H, alkyl, R3; when a = 1: R1 = H, alkyl, aryl; R2 = H; R3 = (CH2)xR6; R4 = H, alkyl, R3; R5 = H, alkyl, (CH2)yR7; R7 = (un)substituted Ph, pyridyl, pyrrolyl, furyl, thienyl, ferrocenyl]. [I]a+ Aa- (R8, R9 = H, halo, NO2, OH, alkoxy, aryloxy, acyloxy, acyl, alkyl, aryl; R10 = NR1R5aCR2R3R4), [II]a+ Aa-, [III]a+ Aa- and [IV]a+ Aa- with antimicrobial activity were prepd. from the resp. aminosteroids. Steroid I (R1 = R2 = R4 = H, R3 = 2-pyridylmethyl, R8 = .beta.-OH, R9 = OMe, a = 0 (V)) was prepd. via reaction of 16.beta.-amino-3-methoxyestra-1,3,5(10)-trien-17.beta.-ol with .alpha.-vinylpyridine in MeOH followed by treatment with AcOH. V showed antibacterial activity [25 .mu.g/mL vs. Mycobact. smeg. (SG 987) and Mycobact. fort. B 12.5 .mu.g/mL vs. Mycobact. chel. B and Mycobact. aurum (SB 66); 12.5 .mu.g/mL vs. Mycobact. vaccae (10670)].

MPTR 1

G1-G16-G17

G1 = 50



MPL: claim 1
 NTE: substitution is restricted

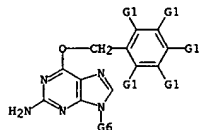
L10 ANSWER 32 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 128:34634 MARPAT
 TITLE: Preparation of O6-substituted guanine compounds and methods for depleting O6-alkylguanine-DNA alkyltransferase activity
 INVENTOR(S): Moschel, Robert C.; Dolan, M. Eileen; Pegg, Anthony E.; McDougall, Mark G.; Chae, Mi-Young
 PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA; Penn State Research Foundation; Arch Development Corp.
 SOURCE: U.S., 25 pp., Cont.-in-part of U.S. Ser. No. 875,438, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 5691307 | A | 19971125 | US 1994-255190 | 19940607 |
| US 492468 | A0 | 19900715 | US 1990-492468 | 19900313 |
| US 5091430 | A | 19920225 | | |
| US 5352669 | A | 19941004 | US 1990-616913 | 19901121 |
| US 5358952 | A | 19941025 | US 1991-805634 | 19911212 |

PRIORITY APPLN. INFO.:
 US 1990-492468 19900313
 US 1990-616913 19901121
 US 1991-805634 19911212
 US 1992-875438 19920429

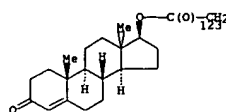
AB Novel O6-substituted guanine compds. I [X1-S = H, halogen, OH, aryl, alkylaryl, NO2, polycyclic arom. alkyl; Z = (un)substituted aryl, carbamoylalkyl, dialkoxymethyl, alkoxyhydroxyalkyl, carboalkoxyalkyl, (di)alkylaminohydroxyalkyl or alkyl-linked peptide, monosaccharide, oligosaccharide, nucleic acid segment, steroid, SOAr; R1 = alkyl, aryl; n = 0 - 3] are effective at reducing O6-alkylguanine-DNA alkyltransferase (AGT) are useful for treating tumors and when used with antineoplastic alkylating agents enhance the chemotherapeutic treatment of tumor cells in a host. Guanine deriv. II was prepd. from O6-benzylguanine via sequential reaction with neat epichlorohydrin and then with isopropylamine in dioxane. II was effective at reducing O6-alkylguanine-DNA alkyltransferase activity, ED50 = 106 .mu.M in HT29 cell-free ext. and ED50 = 23 .mu.M in HT29 cells.

MSR 1



G6 = 123

L10 ANSWER 32 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 1
 NTE: also incorporates claims 3, 4 and 29

L10 ANSWER 33 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 128:727 MARPAT
 TITLE: DHEA combination therapy with interleukin antibodies for antiviral, antibacterial, antimycoplasmal, or anti-intracellular parasite therapy
 INVENTOR(S): Prendergast, Patrick T.
 PATENT ASSIGNEE(S): Prendergast, Patrick T., Ire.
 SOURCE: PCT Int. Appl., 37 pp.
 CODEN: P1XXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

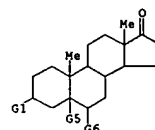
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9738695 | A1 | 19971023 | WO 1997-1B414 | 19970417 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2251733 | AA | 19971023 | CA 1997-2251733 | 19970417 |
| AU 9725741 | A1 | 19971107 | AU 1997-25741 | 19970417 |
| AU 734807 | B2 | 20010621 | | |
| EP 901375 | A1 | 19990317 | EP 1997-917365 | 19970417 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| CN 1216470 | A | 19990512 | CN 1997-193912 | 19970417 |
| JP 2000508654 | T2 | 20000711 | JP 1997-536909 | 19970417 |
| WO 9847516 | A1 | 19981029 | WO 1997-EP5716 | 19971016 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9852219 | A1 | 19981113 | AU 1998-52219 | 19971016 |
| NO 9804851 | A | 19981217 | NO 1998-4851 | 19981016 |
| KR 2000005539 | A | 20000125 | KR 1998-708339 | 19981017 |

PRIORITY APPLN. INFO.:
 US 1996-15695P 19960417
 WO 1997-1B414 19970417
 WO 1997-EP5716 19971016

AB There are provided medicaments, methods of making them, and kits, which include (1) a 17-ketosteroid compd. and/or (2) anti-serum either poly- or monoclonal to Interleukin 10, Interleukin 2, or Interleukin 12, or with any compd. which can effectively inhibit synthesis or the biol. function of Interleukin 10, Interleukin 12, or Interleukin 2, or with an Interleukin 10, Interleukin 12, or Interleukin 2 receptor mol.-blocking agent, or with anti-serum, either polyclonal or monoclonal to human .alpha.-fetoprotein. There are also provided methods of treatment involving such compds. or combinations of compds., including enhancing the immune protective responses when using the 17-ketosteroid compd. as an anti-viral, anti-bacterial, anti-mycoplasm or anti-intracellular parasitic agent.

L10 ANSWER 33 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MSR 2



MPL: claim 19

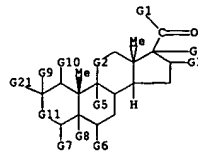
L10 ANSWER 34 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 127:121915 MARPAT
 TITLE: Preparation of novel steroid nitrite/nitrate ester derivatives for use as antiinflammatory drugs
 INVENTOR(S): Tjoeng, Foo S.; Currie, Mark G.; Zupec, Mark E.
 PATENT ASSIGNEE(S): G.D. Searle & Co., USA; Tjoeng, Foo S.; Currie, Mark G.; Zupec, Mark E.
 SOURCE: PCT Int. Appl., 52 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9721721 | A1 | 19970619 | WO 1996-0519219 | 19961206 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 5707984 A 19980113 US 1995-569812 19951208 CA 2239910 AA 19970619 CA 1996-2239910 19961206 AU 9712772 A1 19970703 AU 1997-12772 19961206 EP 873351 A1 19981028 EP 1996-943559 19961206 EP 873351 B1 20000802 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI JP 20000501732 T2 20000215 JP 1997-522081 19961206 AT 195128 E 20000815 AT 1996-943559 19961206 ES 2150152 T3 20001116 ES 1996-943559 19961206 US 1995-569812 19951208 WO 1996-0519219 19961206 | | | | |

PRIORITY APPLN. INFO.:
 AB Nitrite/nitrate steroid esters I [XX1 = C, CH, CH2; XX2 = C(RS); CH, CH(RS); CH2; Q = P = H, halogen, alkyl; R1 = H, OH, ONO, ONO2, halogen, sulfonyl, alkylthio, acyloxy, alkoxy, silyloxy, alkyl, alkenyl, alkenyl, R2 = H, OH, ONO, ONO2, alkoxy; R3 = R4 = H, OH, ONO, ONO2, alkyl, alkenyl, alkenyl, alkoxy; R5 = H, halogen; R6 = H, OH, oxo] were prepd. for use as antiinflammatory agents and smooth muscle relaxants. Thus, pregna-1,4-dien-3,20-dione nitrite ester II was prepd. by reacting prednisolone-21-acetate with amyl nitrite in acetic acid, and, when tested for smooth muscle relaxant activity, II gave an EC50 value of 0.02 .mu.M compared to >100 .mu.M for prednisolone.

MSTR 1

L10 ANSWER 34 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G2 = C(O)
 G11 = C(O)
 DER: and pharmaceutically acceptable esters and prodrugs
 MPL: claim 1
 NTE: substitution is restricted

L10 ANSWER 35 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 127:66093 MARPAT
 TITLE: Preparation of sugar ethers by using rare earth metal catalysts
 INVENTOR(S): Hashizume, Naomichi; Etsuno, Junji; Kobayashi, Osamu
 PATENT ASSIGNEE(S): Kao Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JPKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

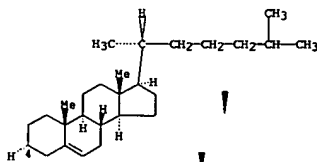
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| JP 09157287 | A2 | 19970617 | JP 1995-316704 | 19951205 |
| JP 1995-316704 | | | JP 1995-316704 | 19951205 |

PRIORITY APPLN. INFO.: CASREACT 127:66093
 AB R(OA)n(OH)z-n (A = glycoside (deriv.) residue; R = C1-36 linear or branched alkyl, alkenyl, cycloalkyl, cholesteryl, cholestanyl, sugar (deriv.) residue; when R = sugar (deriv.) residue, then z = no. of OH of the sugar (deriv.); when R .noteq. sugar (deriv.) residue, then z = 1; n = 1-2) are prepd. by treatment of AOB (A = same as above; B = H, acyl) with R(O)z (R, z = same as above; D = H, Me3Si) in the presence of (RfSO3)2M (Rf = perfluoroalkyl, perfluoroalkoxy; M = rare earth metal) and/or rare earth metal perfluorinated ionomers. 1-O-acetyl-2,3,5-tri-O-benzyl-beta-D-ribofuranose was treated with cyclohexanol trimethylsilyl ether and Yb triflate in CH2Cl2 at room temp. for 5.5 h to give 85% 1-O-cyclohexyl 2,3,5-tri-O-benzyl-D-ribofuranoside.

MSTR 2

G1-G2

G1 = 4



MPL: claim 1

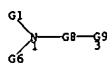
L10 ANSWER 36 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 125:107063 MARPAT
 TITLE: Cationic amphiphiles and plasmids for intracellular delivery of therapeutic molecules
 INVENTOR(S): Siegel, Craig S.; Harris, David J.; Lee, Edward R.; Hubbard, Shirley C.; Cheng, Seng H.; Eastman, Simon J.; Marshall, John; Scheule, Ronald K.; Yew, Nelson S.; et al.
 PATENT ASSIGNEE(S): Genzyme Corporation, USA
 SOURCE: PCT Int. Appl., 152 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 11
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9618372 | A2 | 19960620 | WO 1995-0516174 | 19951208 |
| WO 9618372 | A3 | 19960906 | | |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 5650096 A 19970722 US 1994-352479 19941209 US 5747471 A 19980505 US 1995-540867 19951011 US 6071890 A 20000606 US 1995-545473 19951019 AU 9645161 A1 19960703 AU 1996-45161 19951208 AU 716706 B2 20000302 EP 799059 A1 19971008 EP 1995-943769 19951208 EP 799059 B1 20020731 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE JP 10510813 T2 19981020 JP 1995-519236 19951208 AT 221390 E 20020815 AT 1995-943769 19951208 AU 9732315 A1 19980417 AU 1997-32315 19970610 AU 736143 B2 20010726 EP 1007003 A1 20000614 EP 1997-927989 19970610 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2001500897 T2 20010123 JP 1998-515603 19970610 US 2002013282 A1 20020131 US 1998-166074 19981005 US 1994-352479 19941209 US 1995-4344P 19950926 US 1995-4399P 19950927 US 1995-540867 19951011 US 1995-545473 19951019 WO 1995-0516174 19951208 WO 1997-059748 19970610 | | | | |

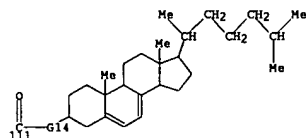
AB Novel cationic amphiphiles are provided that facilitate transport of biol. active (therapeutic) mol. into cells. The amphiphiles contain lipophilic groups derived from steroids, from mono or dialkylamines, or from alkyl or acyl groups; and cationic groups, protonatable at physiol. pH, derived from amines, alkylamines or polyalkylamines. Thus, N4-spermidine cholesteryl carbamate provided an approx. 20-fold enhancement of the transfection ability of plasmid pCMVHI-CAT (chloramphenicol acetyltransferase-encoding) in mice. There are provided also therapeutic compns. prepd. typically by contacting a dispersion of one or more cationic amphiphiles with the therapeutic mol. Therapeutic mol. that

L10 ANSWER 36 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 can be delivered into cells according to the practice of the invention include DNA, RNA, and polypeptides. Representative uses of the therapeutic compns. of the invention include providing gene therapy, and delivery of antisense polynucleotides of biol. active polypeptides to cells. With respect to therapeutic compns. for gene therapy, the DNA is provided typically in the form of a plasmid for complexing with the cationic amphiphile. Novel and highly effective plasmid constructs are also disclosed, including those that are particularly effective at providing gene therapy for clin. conditions complicated by inflammation. Several vectors were constructed for improved delivery of the gene the cystic fibrosis transmembrane conductance regulator (CFTR) under control of the human cytomegalovirus promoter/enhancer during cationic amphiphile-mediated gene transfer. Addnl., targeting of organs for gene therapy by i.v. administration of therapeutic compns. is described. Syntheses are described for N4-spermine cholesteryl carbamate, N4-(N'-cholesteryl carbamate glycineamide)-spermine, N4-spermidine-2,3-dilauryloxypropylamine, and N4-spermine-2,3-dilauryloxypropylamine.

MSFR 1A

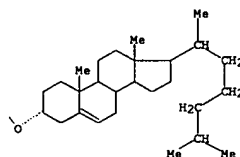


G9 = 111



MPL: claim 1

L10 ANSWER 37 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



DER: or salts or solvates
 MPL: claim 1

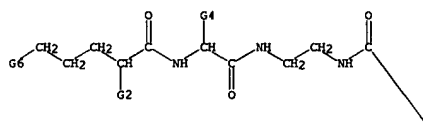
L10 ANSWER 37 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 124:309546 MARPAT
 TITLE: Cationic lipids were prepared by ammonolysis and coupling reactions and cationic lipid-nucleic acid mixtures for nucleic acid delivery in cell transfection
 INVENTOR(S): Lin, Kuei-Ying; Lewis, Jason G.; Matteucci, Mark D.; Wagner, Richard W.
 PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA
 SOURCE: PCT Int. Appl., 50 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| WO 9601840 | A1 | 19960125 | WO 1995-US8555 | 19950707 |

W: CA, JP
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
 US 5777153 A 19980707 US 1994-273045 19940708
 PRIORITY APPLN. INFO.: US 1994-273045 19940708

AB The present invention is directed to new cationic lipids and intermediates in their synthesis that are useful for transfection of prokaryotic or eukaryotic cells with nucleic acids or peptides. The lipids comprise one or two arginine, lysine or ornithine residues linked to a lipophilic moiety. The lipids form a compn. when mixed with polyanions such as nucleic acids. The compns. permit efficient transfer of polyanions into cells without significant toxicity to the cells.

MSFR 2



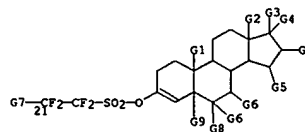
L10 ANSWER 38 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 124:232889 MARPAT
 TITLE: Preparation of steroidal enol polyfluorohydrocarbyl sulfonate compounds as intermediates for steroidal drugs
 INVENTOR(S): Tian, Weisheng
 PATENT ASSIGNEE(S): Shanghai Organic Chemistry Inst., Chinese Academy of Sciences, Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 18 pp.
 CODEN: CHXKEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| CN 1107478 | A | 19950830 | CN 1994-113929 | 19941008 |
| CN 1055930 | B | 20000830 | | |

PRIORITY APPLN. INFO.: CN 1994-113929 19941008

AB The title compds. [I; there may be unsatn. in ring A or B; R1 = H, Me, etc.; R2 = H, Me, Et; R3 = (un)substituted carbamoyl, acetyl, 1-hydroxyethyl, etc.; R4 = H, Et, 1-propynyl, 2-propynyl, CF3; R5, R6 = H, F, Cl, OH, Me, CF2Cl, CF3, or R5R6 = O or CH2; Y = X(CF2CF2)n, CF3(CF2)m; X = F, Cl, Br, iodo, H; n = 0, 1, 2; m = 0-5] are prep'd. Thus, 17.beta.-[tert-butylcarbamoyl]androst-4-en-3-one was treated with CHF2CF2OCF2CF2SO2F in toluene contg. DBU at 80-90.degree. for 6 h followed by silica gel chromatog. to give the title compd. II.

MSFR 1



MPL: claim 1

L10 ANSWER 39 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 124:192411 MARPAT
 TITLE: Bile acid conjugates, derivatives thereof with metal complexes and related uses
 INVENTOR(S): Anelli, Pier Lucio; De Haen, Christoph; Lattuada, Luciano; Morosini, Pierfrancesco; Uggeri, Fulvio
 PATENT ASSIGNEE(S): Bracco S.P.A., Italy; Dibra S.P.A.
 SOURCE: PCT Int. Appl., 111 pp.
 CODEN: P1XX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9532741 | A1 | 19951207 | WO 1995-EP1958 | 19950523 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TT, UA, US, UZ | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9525664 | A1 | 19951221 | AU 1995-25664 | 19950523 |
| EP 760683 | A1 | 19970312 | EP 1995-920075 | 19950523 |
| EP 760683 | B1 | 20000105 | | |
| R: DE, FR, GB, IT | | | | |
| JP 10501528 | T2 | 19980210 | JP 1995-500267 | 19950523 |
| NO 9604967 | A | 19970123 | NO 1996-4967 | 19961122 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | IT 1994-MI1074 | 19940526 |
| | | | WO 1995-EP1958 | 19950523 |

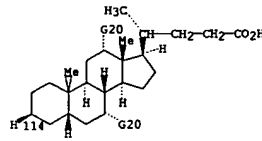
AB The invention relates to novel paramagnetic metal ion chelates and their use as contrast agents in the diagnostic technique known as magnetic resonance imaging (M.R.I.). In particular, the prepn. of gadolinium complexes of cholic acid diethylenetriaminopentaacetic acid or 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid deriv. conjugates with meglumine is described.

MESTR 1A

G21-G1 G19

G21 - 114

L10 ANSWER 39 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



DER: or complex chelates with such metals as G19, and salts
 MPL: claim 1

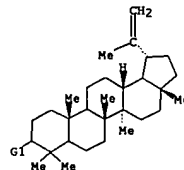
L10 ANSWER 40 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 124:195584 MARPAT
 TITLE: A pharmaceutical composition containing .beta.-lupeol derivatives for the prevention and/or treatment of viral infections and optionally inflammations
 INVENTOR(S): Berg, Kurt; Christensen, Soeren Broegger; Boye-Knudsen, Carsten; Ming, Chen; Simonsen, Beth Den.
 PATENT ASSIGNEE(S): PCT Int. Appl., 51 pp.
 SOURCE: CODEN: P1XXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9535103 | A1 | 19951228 | WO 1995-DK256 | 19950620 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TH, TT | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2193396 | AA | 19951228 | CA 1995-2193396 | 19950620 |
| AU 9527340 | A1 | 19960115 | AU 1995-27340 | 19950620 |
| AU 689603 | B2 | 19980402 | | |
| EP 762876 | A1 | 19970319 | EP 1995-922445 | 19950620 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| CN 1158566 | A | 19970903 | CN 1995-194431 | 19950620 |
| JP 10504279 | T2 | 19980428 | JP 1995-501510 | 19950620 |
| FI 9605114 | A | 19961219 | FI 1996-5114 | 19961219 |
| NO 9605468 | A | 19970219 | NO 1996-5468 | 19961219 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | DK 1994-722 | 19940620 |
| | | | DK 1994-926 | 19940809 |
| | | | WO 1995-DK256 | 19950620 |

AB A pharmaceutical compn. for the prevention and/or treatment of viral infections and optionally inflammations comprises one or more .beta.-lupeol derivs., optionally in combination with an ammonium ion-releasing compd., and/or in combination with one or more mono or polysulfated mono, oligo or polysaccharides or analogs and/or derivs. thereof. The pharmaceutical compn. may be in the form of chewing gums, lozenges, chewing tablets, resorbibles, drops, trouches, gels, mouth ointments, solns., mucoadhesive formulations or depot prepn.

MESTR 1

L10 ANSWER 40 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



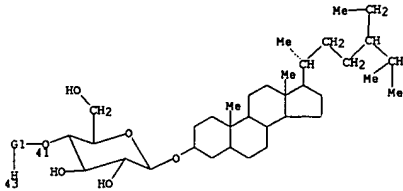
MPL: claim 1

L10 ANSWER 41 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 123:122721 MARPAT
 TITLE: hair tonics and growth stimulants containing stigmastanol glycosides
 INVENTOR(S): Suzuki, Masami; Kanamaru, Akiko; Yamamoto, Takuya
 PATENT ASSIGNEE(S): Pola Kasei Kogyo Kk, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 07109294 | A2 | 19950425 | JP 1993-253462 | 19931008 |
| JP 3034411 | B2 | 20000417 | | |

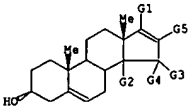
PRIORITY APPLN. INFO.: JP 1993-253462 19931008
 AB Hair tonics and growth stimulants contain stigmastanol glycosides (I) (n = 2-5). A hair tonic contained stigmastanol maltoside 3.0, propylene glycol 5.0, vitamin B2 0.5, yeast ext. (contg. nucleic acid) 0.5, di-K glycyrrhizin 0.3, diphenhydramine-HCl 0.3, methylparaben 0.2, menthol 0.2, ethanol 50.0, vitamin E 0.05, and purified water 39.85 parts. The prepn. were safe and effective.

MSTR 1



MPL: claim 1

L10 ANSWER 42 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 3

L10 ANSWER 42 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 123:112515 MARPAT
 TITLE: Synthesis of 17-(3-pyridyl) steroids
 INVENTOR(S): Potter, Gerard Andrew; Hardcastle, Ian Robert
 PATENT ASSIGNEE(S): British Technology Group Ltd., UK
 SOURCE: Brit. UK Pat. Appl., 17 pp. CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| GB 2282377 | A1 | 19950405 | GB 1994-19139 | 19940922 |
| GB 2282377 | B2 | 19970903 | | |
| CA 2170286 | AA | 19950406 | CA 1994-2170286 | 19940922 |
| WO 9509178 | A1 | 19950406 | WO 1994-GB2054 | 19940922 |

W: AU, CA, JP, NZ
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
 AU 9476618 A1 19950418 AU 1994-76618 19940922
 AU 676088 B2 19970227
 EP 721461 A1 19960717 EP 1994-927003 19940922
 EP 721461 B1 19990203
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
 JP 09502994 T2 19970325 JP 1995-510163 19940922
 AT 176481 E 19990215 AT 1994-927003 19940922
 ES 2127413 T3 19990416 ES 1994-927003 19940922
 US 5604213 A 19970218 US 1994-315882 19940930
 US 5618807 A 19970408 US 1995-392178 19950222
 PRIORITY APPLN. INFO.: GB 1993-20132 19930930
 GB 1994-14192 19940714
 GB 1992-7057 19920331
 GB 1992-24880 19921127
 WO 1994-GB2054 19940922
 US 1994-315882 19940930

OTHER SOURCE(S): CASREACT 123:112515
 AB 17-(3-pyridinyl)-substituted steroids are prepd. by subjecting a 17-iodo or -bromo steroid to a palladium complex-catalyzed cross-coupling reaction with a (3-pyridyl)-substituted borane in a proportion of at least 1.0 equiv. of borane per equiv. of steroid, in an org. solvent, and optionally esterifying the resulting 3.beta.-hydroxy steroid. Thus, dehydroepiandrosterone was converted to its hydrazone and then to its iodide. The latter compd. was treated with 1.1 equiv. diethyl(3-pyridyl)borane and then acetylated to give 3.beta.-acetoxy-17-(3-pyridyl)androsta-5,16-diene.

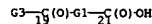
MSTR 1

L10 ANSWER 43 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 123:56397 MARPAT
 TITLE: Preparation of sterin esters via esterification with succinic anhydride derivatives
 INVENTOR(S): Mizushima, Yosen; Maeda, Toshiji
 PATENT ASSIGNEE(S): Kao Corp, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp. CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

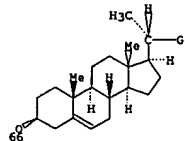
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 07109291 | A2 | 19950425 | JP 1993-251616 | 19931007 |
| JP 3188069 | B2 | 20010716 | | |

PRIORITY APPLN. INFO.: JP 1993-251616 19931007
 OTHER SOURCE(S): CASREACT 123:56397
 AB Title compds. are prepd. via reaction of alkyl- or alkenylsuccinic anhydrides with sterins and contacting the product with either an inert gas or steam. Thus, 2-hexadecenylsuccinic anhydride was heated with cholesterol at 100.degree. for 1 h and then at 130.degree. for 2 h, the reaction mixt. was cooled to 100.degree., and the product was contacted with steam at 20 g/h for 5 h to give 2-hexadecenylsuccinic acid monoester with cholesterol of good quality.

MSTR 2



G3 = 66



MPL: claim 1

L10 ANSWER 44 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 122:277639 MARPAT
 TITLE: Fullerene derivatives, methods for preparing them, and their use
 INVENTOR(S): Bingel, Carsten
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany
 SOURCE: Ger. Offen. 9 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| DE 4313481 | A1 | 19941027 | DE 1993-4313481 | 19930424 |
| WO 9425424 | A1 | 19941110 | WO 1994-EP1079 | 19940407 |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA 2161246 | AA | 19941110 | CA 1994-2161246 | 19940407 |
| EP 695287 | A1 | 19960207 | EP 1994-913120 | 19940407 |
| EP 695287 | B1 | 19971029 | | |
| R: BE, CH, DE, FR, GB, IT, LI, NL | | | | |
| JP 08509232 | T2 | 19961001 | JP 1994-523806 | 19940407 |
| US 5739376 | A | 19980414 | US 1995-535163 | 19951020 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | DE 1993-4313481 | 19930424 |
| | | | WO 1994-EP1079 | 19940407 |

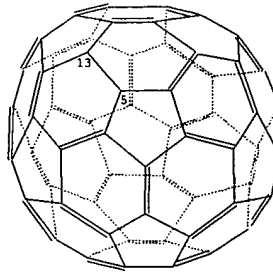
AB The title derivs. are described by the general formula I (F = a C20+2m fullerene; E1 and E2 = the same or different groups selected from COOR, CONRR1, CHO, COR, CN, F(O)(OR)2, and SO2R, different (from each other) RCO, R, or H, or different NO2, R3, or H groups; R and R1 = a singly or multiply substituted C1-20 aliph. residue in which up to 3 CH2 units may be replaced by O or NR4; R3 = a singly or multiply substituted C1-20 aliph. residue; R4 = a C1-20 alkyl group, a benzyl group, or a benzyl or Ph group which can optionally be substituted with 1-5 substituents selected from R, OH, OR, COOR, OOCR, SO3H, SO2Cl, F, Cl, Br, and CN; n = a natural no. ranging from 1 to 10 + m; and m = 20, 25, 28, or 29); their prepn. entails reacting a C20+2m fullerene with a reactant described by the general formula II (X = -Cl, -Br, -I, -OSO2Ar, -OSO2CF3, -OSO2C4F9; and Ar = a Ph group) in the presence of a base selected from and alkali metal hydride, alkali metal hydroxide, alcoholates, amides, amines, or guanidine in an aprotic solvent at a temp. in the range -78 to 180 degrees. Use of the fullerenes in optoelectronic devices is indicated.

MFSTR 1



G1 = 13-1 5-3

L10 ANSWER 44 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN (Continued)



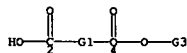
MPL: claim 1
 NTE: substitution is restricted
 NTE: Ak in G2 and G4 may contain further interruptions

L10 ANSWER 45 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 122:248034 MARPAT
 TITLE: Water-in-oil cosmetic emulsions containing amides and sterol dicarboxylic acid monoesters
 INVENTOR(S): Takahashi, Akihiko; Koba, Junzuke; Fukazawa, Junichi
 PATENT ASSIGNEE(S): Kao Corp, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JIIOAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

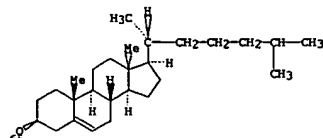
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 07010731 | A2 | 19950113 | JP 1993-157338 | 19930628 |
| JP 3271828 | B2 | 20020408 | | |
| PRIORITY APPLN. INFO.: | | | | |
| | | | JP 1993-157338 | 19930628 |

AB Water-in-oil cosmetic emulsions contain (A) R1OCH2CH(OH)CH2N(XOH)COR2 [I]; R1 = C10-26 linear or branched hydrocarbyl; R2 = C9-25 linear or branched hydrocarbyl; X = (CH2)n, [(CH2)2]n(CH2)2, CH2CH(OH)CH2; n = 2-6; (B) HO2CR3CO2R5 [R3 = (CH2)p (p = 2-10), CH2CHR4, CHR4CH2]; R4 = C6-20 linear or branched alkyl, alkenyl; R5 = residue of natural sterol or its hydrogenation product from which H of the OH group is removed; (C) 10-70 wt.% oily substances, and (D) 10-88 wt.% H2O [A/B = 0.01-10 (by wt.)] and do not practically contain hydrophilic surfactants. The emulsions are stable and show skin-moisturizing effect. Cholesterol was stirred with n-hexadecylsuccinic anhydride at 160 degrees. for 10 min and stirred at 130 degrees. for 1 h to give 89.2% n-hexadecylsuccinic acid cholesterol monoester (II). Cosmetic cream contg. Sphingolipid E [I (R1 = n-C16H33, R2 = n-C15H31, X = C2H4)] 5.0, II 15.0, squalene 9.0, olive oil 3.0, jojoba oil 1.0, iso-Pr palmitate 5.0, butylparaben 0.1, methylparaben 0.3, and H2O to 100 wt.% was formulated.

MFSTR 2



G3 = 65



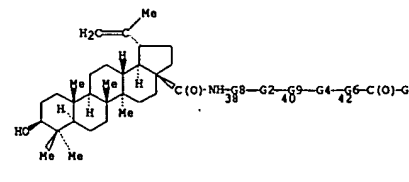
MPL: claim 1

L10 ANSWER 46 OF 50 MARPAT COPYRIGHT 2003 ACS ON STN
 ACCESSION NUMBER: 122:214296 MARPAT
 TITLE: Preparation of antiviral lupane derivatives and pharmaceutical formulations containing them
 INVENTOR(S): Dereu, Norbert; Evers, Michel; Poujade, Christele; Soler, Françoise
 PATENT ASSIGNEE(S): Rhone-Poulenc Rorer S.A., Fr.
 SOURCE: PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9426695 | A1 | 19941124 | WO 1994-FR532 | 19940506 |
| W: AU, BB, BG, BA, BY, CA, CN, CZ, FI, HU, JP, KP, KR, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, UZ, VN | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| FR 2705094 | A1 | 19941118 | | 19930511 |
| FR 2705094 | B1 | 19950804 | | |
| CA 2162702 | AA | 19941124 | CA 1994-2162702 | 19940506 |
| AU 9467879 | A1 | 19941212 | AU 1994-67879 | 19940506 |
| EP 698008 | A1 | 19960228 | EP 1994-916260 | 19940506 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| JP 0850968 | T2 | 19961022 | JP 1994-525050 | 19940506 |
| ZA 9403201 | A | 19950116 | ZA 1994-3201 | 19940509 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | FR 1993-5619 | 19930511 |
| | | | WO 1994-FR532 | 19940506 |

AB The title compds. [I; R = (CH2)nX(CH2)mY (CR1R2)PCO2R3; R1, R2, R3 = H, alkyl; X = carbamoyl, N-methylcarbamoyl, aminocarbonyl, N-methylaminocarbonyl; Y = (un)substituted phenylene; m, p = 0-2; n = 6-12; such that m + n + p = 6-12] [e.g., N'-[N-(3.beta.-hydroxy-20(29)-lupen-28-oyl)-8-aminoctanoyl]-3-amino-6-chlorobenzoic acid], useful as antiviral agents against HIV (no data) and the herpes family of viruses (no data), are prepd. and a 1-contg. formulation presented.

MFSTR 1



DER: and pharmaceutically acceptable salts
 MPL: claim 1
 NTE: substitution is restricted
 STE: and stereoisomers

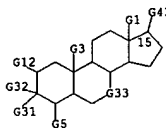
L10 ANSWER 46 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

L10 ANSWER 47 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 120:107475 MARPAT
 TITLE: preparation of 4-alkenylsterols and analogs as
 anticholesteremics
 INVENTOR(S): Archer, Robert Allen; Beavers, Lisa Selsam; Gadski,
 Robert Alan; Lin, Ho Shen; McClure, Don B.; McCowan,
 Jefferson Ray; Pawlak, Joseph Matthew; Rampersaud,
 Ashraff Ali; Schmidt, Robert John; et al.
 PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA
 SOURCE: Eur. Pat. Appl., 121 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 562849 | A2 | 19930929 | EP 1993-302261 | 19930324 |
| EP 562849 | A3 | 19940216 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| NO 9301117 | A | 19930928 | NO 1993-1117 | 19930325 |
| CA 2092766 | AA | 19930904 | CA 1993-2092766 | 19930326 |
| AU 9335514 | A1 | 19930930 | AU 1993-35514 | 19930326 |
| HU 64082 | A2 | 19931129 | HU 1993-901 | 19930326 |
| CN 1081682 | A | 19940209 | CN 1993-105203 | 19930326 |
| JP 06056670 | A2 | 19940301 | JP 1993-67968 | 19930326 |
| ZA 9302178 | A | 19940926 | ZA 1993-2178 | 19930326 |
| BR 9301342 | A | 19931005 | BR 1993-1342 | 19930329 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1992-85908 | 19920327 |
| | | | US 1993-18985 | 19930303 |

AB Title compds. [I: R = OH, acyloxy, NH₂, AcNH, etc.; R₁ = (halo)alkyl; R₂ = H, (halo)methyl; R₃ = H, (halo)alkyl, CH₂CR₆:CR₇R₈; R₄ = H, CH₂Ph, (CH₂)_nX₄; R₅ = AZLIX₃; A, Z = bond, O, CHMe, CMe(OH), etc.; R₆ = H, halo, (halo)alk(en)yl; R₇, R₈ = H, halo, (halo)methyl; R_{6R7} = atoms to complete a ring; X = O, H₂, H and OH, H and halo, etc.; X₃ = H, Ph, OPh, halo, haloalkyl, OH, etc.; X₄ = H, OH, (halo)alkyl, (halo)alkoxy, etc.; Z₁ = (substituted) alk(en)ylene; n = 1-16; dashed lines = optional position of optional addnl. bond; were prepd. as upregulators of LDL receptor gene expression. Thus, (+)-4-cholesten-3-one was condensed with BrCH₂CH₂:CH₂ and the product reduced to give title compd. II which reduced plasma cholesterol levels from 252 to 205 mg/dl in hypercholesteremic African green monkeys receiving 50 mg/kg/day in diet.

MSTR 1A



L10 ANSWER 47 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

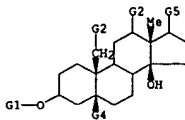
G33 = C(O)
 DER: or pharmaceutically acceptable salts
 MPL: claim 1
 NTE: additional ring formation possible

L10 ANSWER 48 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 119:271614 MARPAT
 TITLE: Preparation of N-oxides of pyridazinylsteroid
 glycosides as cardiovascular agents
 INVENTOR(S): Bertolini, Giorgio; Casagrande, Cesare; Norcini,
 Gabriele; Santangelo, Francesco
 PATENT ASSIGNEE(S): Zambon Group S.p.A., Italy
 SOURCE: Eur. Pat. Appl., 6 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 551953 | A2 | 19930721 | EP 1993-200087 | 19930114 |
| EP 551953 | A3 | 19940629 | | |
| EP 551953 | B1 | 19960605 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| AT 138932 | E | 19960615 | AT 1993-200087 | 19930114 |
| ES 2088627 | T3 | 19960816 | ES 1993-200087 | 19930114 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | IT 1992-M175 | 19920116 |

AB Title compds. [I: R = a glycidic group (sic); R₁, R₂ = H, OR₅; R₃ = H, OH; R₄ = 4-pyridazyl-1- or 2-N-oxide; R₅ = H, HCO, Ac, EtCO, PrCO] were prepd. Thus, 3.beta.-(1.alpha.-L-tevetopyranosyloxy)-14-hydroxy-17.beta.-(4-pyridazinyl-2-N-oxide)-5.beta.,14.beta.-androstane, prepd. by 3-ClCGH₄CO₂H oxidn. of the corresponding pyridazinylsteroid glycoside, had K₁ of gtoreq.100.0 and 0.08 nM for binding at .alpha.1 and .alpha.3 isoforms of rat (Na⁺ + K⁺)-ATPase, resp.

MSTR 1



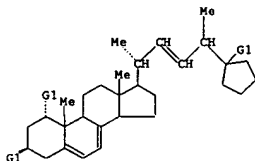
MPL: claim 1

L10 ANSWER 49 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 119:226242 MARPAT
 TITLE: Preparation of 26,27-dimethylene-1.alpha.,25-dihydroxyvitamin D2 for treatment of bone disease
 INVENTOR(S): DeLuca, Hector Floyd; Nakagawa, Naoshi
 PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA
 SOURCE: Eur. Pat. Appl., 15 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 549318 | A2 | 19930630 | EP 1992-311681 | 19921222 |
| EP 549318 | A3 | 19931006 | | |
| EP 549318 | B1 | 19961016 | | |
| R: AT, BE, CH, DE, DK, ES, FR, IT, LI, NL, SE | | | | |
| AU 9230362 | A1 | 19930701 | AU 1992-30362 | 19921222 |
| AU 656829 | B2 | 19950216 | | |
| AT 144250 | E | 19961115 | AT 1992-311681 | 19921222 |
| JP 05271183 | A2 | 19931019 | JP 1992-358790 | 19921228 |
| JP 3195452 | B2 | 20010806 | | |
| US 5397775 | A | 19950314 | US 1993-70500 | 19930602 |
| US 5478955 | A | 19951226 | US 1994-337110 | 19941110 |
| US 5494906 | A | 19960227 | US 1995-435649 | 19950505 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1991-813852 | 19911226 |
| | | | US 1993-70500 | 19930602 |
| | | | US 1994-337110 | 19941110 |

AB Title compds. (I; R1 = H, R2 = Me, or vice versa), were prepd. Thus, hydroxybutanoate II was converted in several steps to sulfone III (TES = Et3Si). This in THF was treated with LiNEt2 at -50 to -60.degree. the mixt. was cooled to -78.degree. and treated with (20S)-1.alpha.,3.beta.-bis(methoxycarbonyloxy)-20-methylpregna-5,7-dien-21-al to give a residue which was treated with Ac2O/DMAP to give another residue which was treated with Na/Hg and NaHCO3 in MeOH/THF to give 65.2% triene deriv. This was converted to title compd. I (R1 = Me, R2 = H) in several steps. I have reduced bone calcium mobilization activity relative to 1,25-dihydroxyvitamin D3, and are at least as active in cell differentiation and receptor binding activities.

MSTR 1



L10 ANSWER 50 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 119:160646 MARPAT
 TITLE: Preparation and formulation of angiotatic steroids
 INVENTOR(S): Clark, Abbot F.; Conrow, Raymond E.
 PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA
 SOURCE: PCT Int. Appl., 54 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

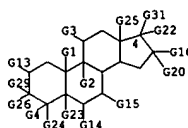
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9310141 | A2 | 19930527 | WO 1992-US10133 | 19921123 |
| WO 9310141 | A3 | 19930902 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE | | | | |
| US 5371078 | A | 19941206 | US 1992-941485 | 19920908 |
| AU 9332235 | A1 | 19930615 | AU 1993-32235 | 19921123 |
| AU 678961 | B2 | 19970619 | | |
| EP 614463 | A1 | 19940914 | EP 1993-900609 | 19921123 |
| EP 614463 | B1 | 20030212 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE | | | | |
| JP 07501081 | T2 | 19950202 | JP 1993-509563 | 19921123 |
| JP 3378245 | B2 | 20030217 | | |
| AT 232540 | E | 20030215 | AT 1993-900609 | 19921123 |
| US 5679666 | A | 19971021 | US 1994-342524 | 19941121 |
| US 5770592 | A | 19980623 | US 1997-895184 | 19970716 |
| WO 9903503 | A1 | 19990128 | WO 1998-US12711 | 19980618 |
| R: AU, BR, CA, JP, MX, US | | | | |
| R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9881515 | A1 | 19990210 | AU 1998-81515 | 19980618 |
| AU 734195 | B2 | 20010607 | | |
| EP 1003553 | A1 | 20000531 | EP 1998-931367 | 19980618 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| BR 9811012 | A | 20001017 | BR 1998-11012 | 19980618 |
| JP 200150170 | T2 | 20010731 | JP 2000-502798 | 19980618 |
| MX 9911140 | A | 20000430 | MX 1999-11140 | 19991202 |
| US 6297228 | B1 | 20011002 | US 1999-445237 | 19991202 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1991-796169 | 19911122 |
| | | | US 1992-892448 | 19920602 |
| | | | US 1992-941485 | 19920908 |
| | | | US 1988-264918 | 19881031 |
| | | | US 1989-419226 | 19891010 |
| | | | US 1990-559123 | 19900727 |
| | | | WO 1992-US10133 | 19921123 |
| | | | US 1994-342524 | 19941121 |
| | | | US 1997-895184 | 19970716 |
| | | | WO 1998-US12711 | 19980618 |

AB Title compds. (I and II; R1 = H, .beta.-Me, .beta.-Et, R2 = H, F, Cl; R3 = H, alkoxy, alkanoyloxy, halo, O2CNH2, etc.; R2R3 = bond, O; R5 = H, OH, halo, Me, Ph, vinyl, alkyl, R6 = H, Me; R9 = H, OH, Me, F, 2-(alkoxy)ethyl, 2-(alkanoyloxy)ethyl, etc.; R10 = H, C.tplbond.CH, vinyl, halo, OH, Me, etc.; R12 = H; R1R12 = bond; R13 = H, OH, alkoxy, NH2, etc.; R14 = H; R12R14 = bond; R25 = OH, alkoxy, alkanoyloxy, CO2H, CH2OH, etc.; Z = CHR4, etc.; R4 = H, Me, Cl, F) were prepd. Thus, tetrahydrocortisol-F was converted in 3 steps to 5.beta.-pregnan-11.beta.,17.alpha.,21-triol-2-one. 4,9(11)-Pregnadiene-17.alpha.,21-diol-3,20-dione gave complete

L10 ANSWER 49 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 MPL: claim 4

L10 ANSWER 50 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
 inhibition of lipopolysaccharide-induced corneal neovascularization in rabbit eye at 50 .mu.g in a pellet implant.

MSTR 1



MPL: claim 1
 NTE: substitution is restricted
 NTE: additional steroid derivatives allowed

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(FILE 'HOME' ENTERED AT 10:49:06 ON 12 NOV 2003)

FILE 'REGISTRY' ENTERED AT 10:49:10 ON 12 NOV 2003

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 2415 S L1 FULL
L4 STRUCTURE UPLOADED
L5 640 S L4 FULL SUB=L3

FILE 'CAPLUS' ENTERED AT 10:52:45 ON 12 NOV 2003

L6 147 S L5
L7 1 S L6 NOT PY>=1992
L8 1 S L6 NOT PY>=1991

FILE 'MARPAT' ENTERED AT 10:54:53 ON 12 NOV 2003

L9 50 S L5
L10 50 S L9 NOT PY>=1991

FILE 'BEILSTEIN' ENTERED AT 11:02:51 ON 12 NOV 2003

L11 622 S L1 FULL

FILE 'USPATFULL' ENTERED AT 11:03:41 ON 12 NOV 2003

L12 49 S L5
L13 0 S L12 NOT PY>=1991

10/084,235

Page 1

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